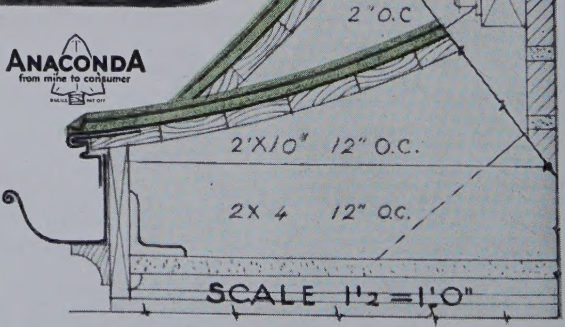
PENCIL POINTS

OCTOBER
1941



TYPIFYING the manner standing seam sheet copper roofing may be used over multiple dwelling entrances to impart warmth and color . . . and to accentuate the structure's individuality.

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of modern steam heating.

Adolph G. Syska, of Syska & Hennessy, New York Consulting Engineers. Member of American Society of Heating & Ventilating Engineers. M. E., Columbia University.

"Flexibility is an important feature of the mechanical equipment of modern buildings," writes Adolph G. Syska. "Flexibility means freedom to arrange the elements so that the installation will best fit the service requirements at minimum cost. It also means ease in modification for enlargement, rearrangement or change of use. In the heating system, flexibility means also the ability to heat quickly to the desired temperature without lag or over-riding. The modern steam heating system with orifices and central control provides economical and continuous heat delivery and meets our most exacting requirements for flexibility. . . . We specify and use this type of modern steam heating system, both with and without accompanying air conditioning equipment in preference to other less flexible heating methods."

▲

In their design for the new Cardinal Hayes Memorial High School in New York City, Syska & Hennessy incorporated a "Controlled-by-the-Weather" Webster Moderator System of Steam Heating. This well-known firm has specified Webster Systems for many years in some of the finest buildings in New York.

STEAM Heats America . . . .

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WARREN WEBSTER & COMPANY, Camden, New Jersey
Pioneers of Vacuum System of Steam Heating
Est. 1888 : : Representatives in 65 U. S. Cities

GET THAT *much needed* EXTRA FLOOR SPACE WITH A

Q-FLOOR MEZZANINE

TO THOSE OF YOUR CLIENTS who are in urgent need of extra floor space, suggest Q-FLOORS . . . as mezzanines, intermediate or additional floors or in light wells and courts. At amazingly low cost these wasted areas can be put to work. Since Q-FLOORS are shallow and require little head room they can be utilized where other types of floors are impractical.

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A Q-Floor job is CLEAN and DRY . . . there are no forms to erect or tear down. No wait concrete to set, no muss and dirt.

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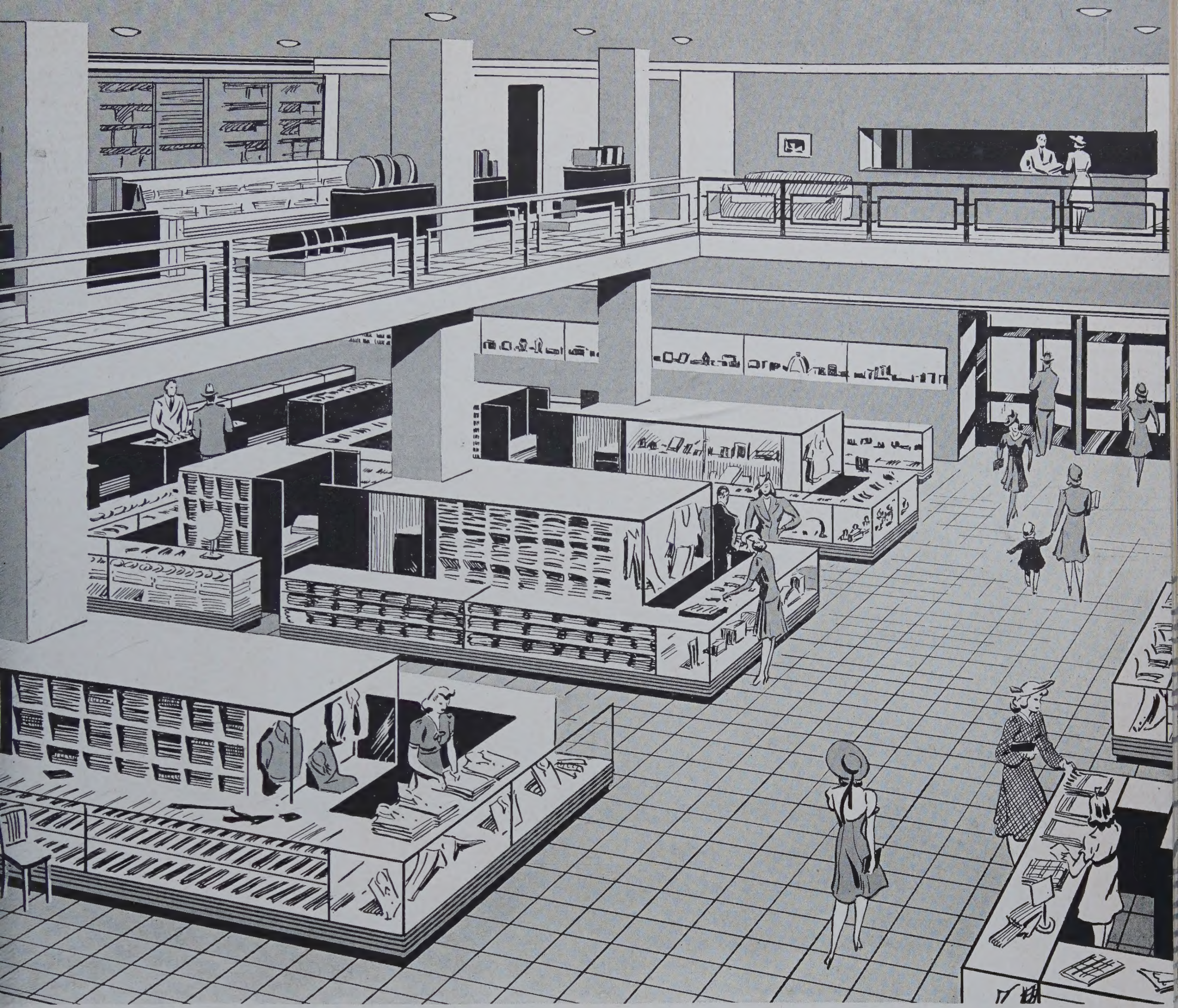
And Q-Floors are always electricall . . . never can become obsolete, for they 100 per cent electrical availability, this yea year and every year after. Of themselves th

QUICK-IN

ROBERTSON



es of cellular steel wiring raceways which are accessible through a system of headers or channels. Every type of wiring, for telephones, (high and low voltage) can be carried through cells to any 6-inch square over the entire floor whenever needed.

Robertson Representatives for suggestions, ed information and cost estimates.

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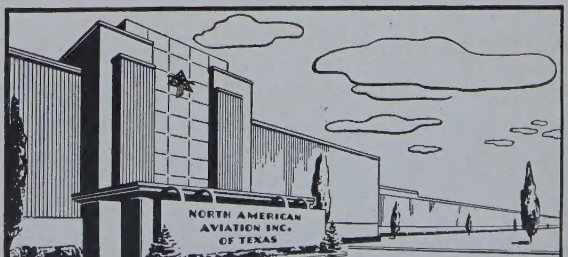
FLOORS

UICK-CHANGE

Q-PANELS

SPEED DEFENSE BUILDING



North American Aviation, Inc., Dallas Plant, J. Gordon Turnbull, Consulting Engineer, Citizens Bldg., Cleveland, O.

In 105 days this 23-acre plant for North American Aviation, Inc., at Dallas was built and put into production. 1,105,000 square feet of Robertson Q-Panels were used. Besides speed in construction, Q-Panels combine attractive appearance with great strength and durability.

KITCHENS

then -

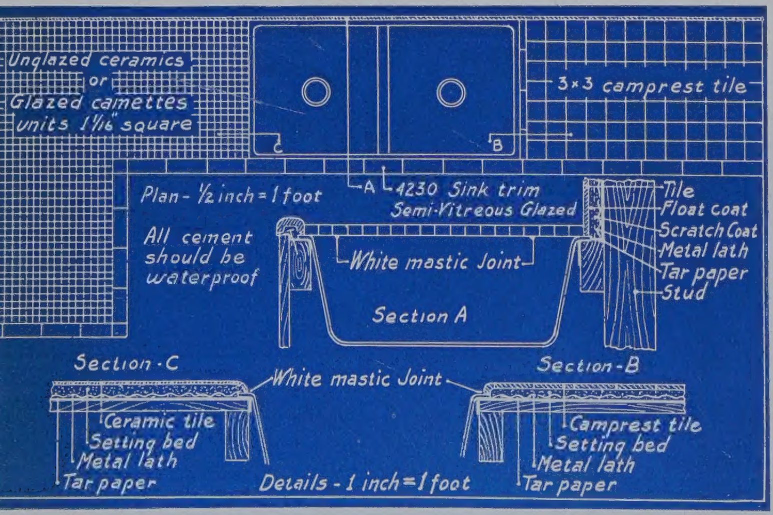
. . . now

After generations of carrying water by the bucket, the good housewife of bygone years figured a kitchen pump as the last word in luxurious living.

Today, a kitchen may have the latest in streamlined plumbing, a dish washer, even an automatic device to feed the dog, but if it lacks the beauty and utility of real clay tile it will still be in the shadow of the kitchen pump — a compromise with modern comfort and convenience.

Color-balanced Suntile is making it easy for the architect to face the problems of defense shortages without compromise. Being Real Clay Tile it is made principally of domestic clays that are abundant in this country. Tiled drainboards, wainscots, floors and showers can properly be used without drawing appreciably on any precious metals or supplies needed for defense.

See the Suntile Rainbow Chest of interchangeable actual size tiles at your Suntile contractor's show room. Refer to the classified section of your telephone directory under "Tile Contractors" for list of selected Suntile dealers.



SINK TOP INSTALLATION DETAIL

The drainboard treatment shown illustrates the simplicity of design and installation of this all-ceramic working surface. Sub flooring of work top is seven-ply waterproofed plywood or maple, covered with waterproofed paper. Cement setting bed and jointing contains an integral waterproofing compound. The tile is impervious to dirt, grease and moisture. The intersection of the tile nosing and porcelain sink is caulked with a white plastic waterproofing compound. Metal lath reinforcing adds tremendous additional strength to the entire construction.

The entire installation is performed on the job, and is so flexible that it will fit practically any job conditions.

Sunti

Bright with color

The Cambridge Tile Mfg. Co.

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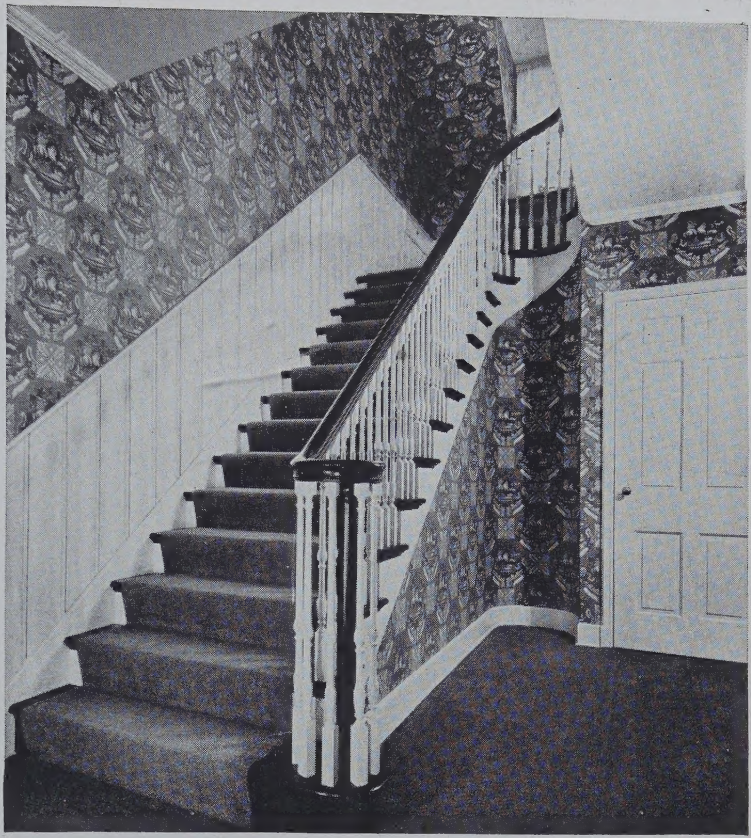

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Why not see the entire line of Curtis Architectural Woodwork which includes the famous Silentite "Insulated" Window? Write Curtis now—or use the coupon. We'll send complete details. If you live in Canada, write to W. C. Edwards & Co., Ltd., 991 Somerset Street, West, Ottawa, Canada.

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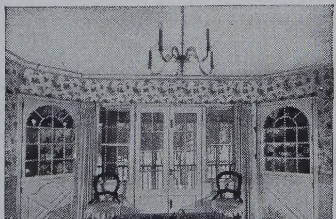

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CURTIS
WOODWORK

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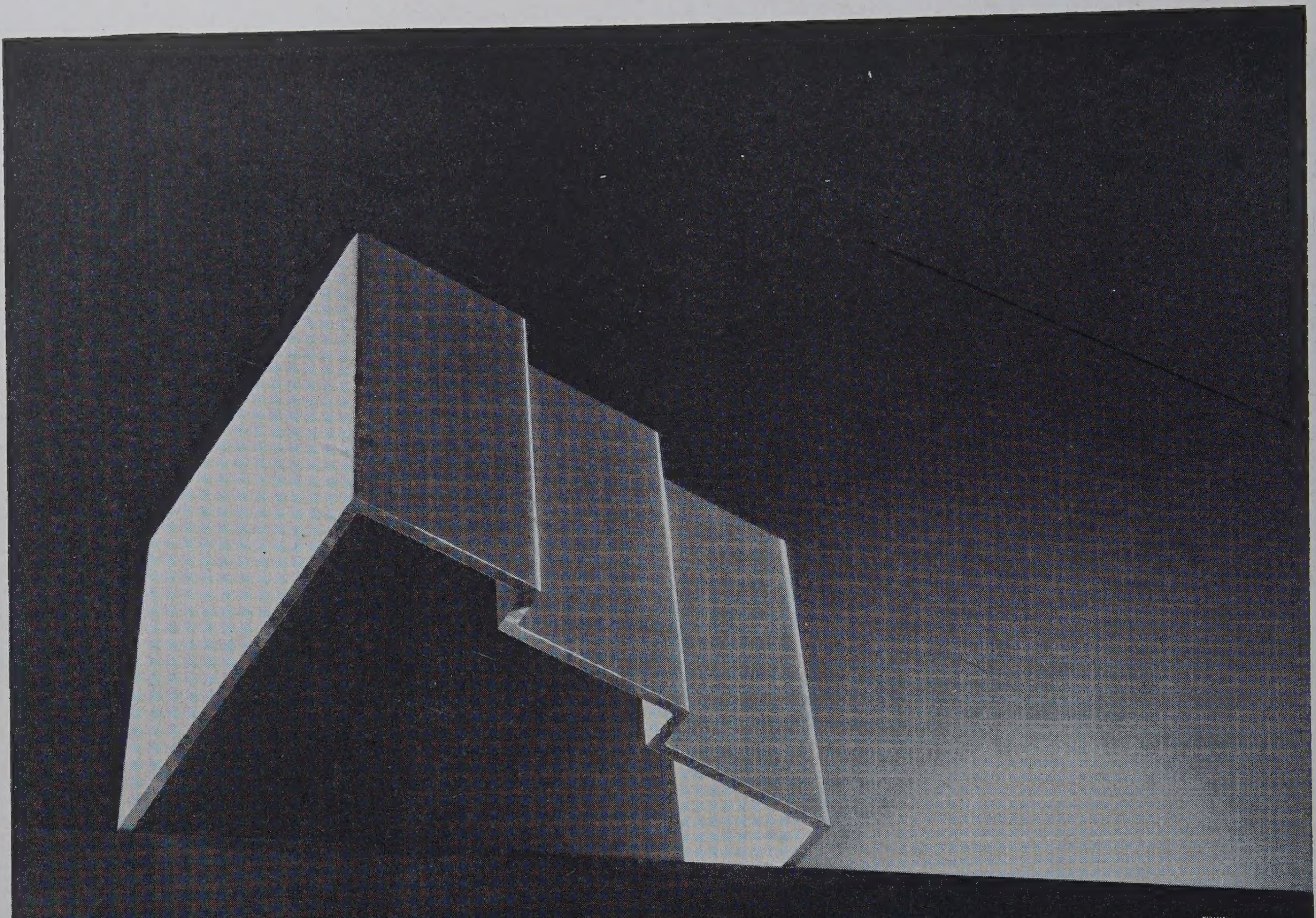
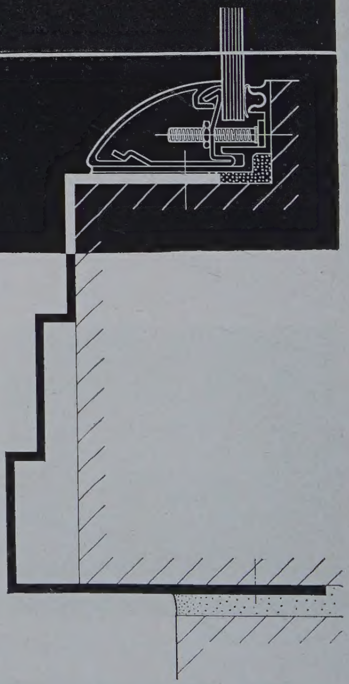


SELF-SUPPORTING



• Pittco Store Front Metal shapes are extruded of aluminum and bronze, with thick, sturdy walls of sufficient rigidity to make them self-supporting. With Pittco members, snug-fitting cores to prevent denting of the metal surface are unnecessary. Were the moulding illustrated above made of light sheet metal, the marks of common abuse would soon be evident upon its smooth, plain surfaces. But when extruded in the Pittco manner, it should retain its original surface beauty indefinitely. This is but one of the reasons why Pittco Store Front Metal is being used more extensively every day by leading architects to meet exacting store front requirements. Pittsburgh Plate Glass Company, Grant Bldg., Pittsburgh, Pa.

PITTCO STORE FRONT METAL

PITTSBURGH PLATE GLASS COMPANY

"PITTSBURGH" stands for Quality Glass and Paint

DETAIL

Recently, for the frame of a store front and door, an architect desired a moulding severe, plain and bold in character. He selected this Pittco PX 155 as the shape which best fulfilled his specific requirements.

TUTEN MART, INC., Greenville, S. C., puts its best foot forward with a traffic-making, traffic-taking floor of Armstrong's Linoleum. Field is rich brown Marbelle No. 09 with Linostrips of brown and evergreen.

This FLOOR *has* STAMINA

As an architect, you know best what qualities you—and your clients—demand of a floor. Certainly stamina is one. The ability to take it . . . to stand the gaff of constant, careless traffic . . . should be an inherent quality of every commercial flooring.

Armstrong's Linoleum has stamina. That's why it fits so perfectly into a store's flooring picture. Its smooth, resilient surface stands up under grinding grit and sliding furniture. The rich colors run all the way through the composition, keep fresh and bright looking for years. And a linoleum floor never needs expensive refinishing.

But this flooring offers a whole lot more than the ability to take traffic. Over 200 patterns . . . in many different colors and textures . . . give you full freedom for floor planning. All kinds of unusual original designs . . . borders, guide lines, and custom insets . . . can be executed inexpensively in your client's shop or store.

Cleaning care and cost are kept at a minimum, too . . . and that's mighty important. Routine sweeping, occasional washing and waxing keep Armstrong's Linoleum always spotlessly clean.

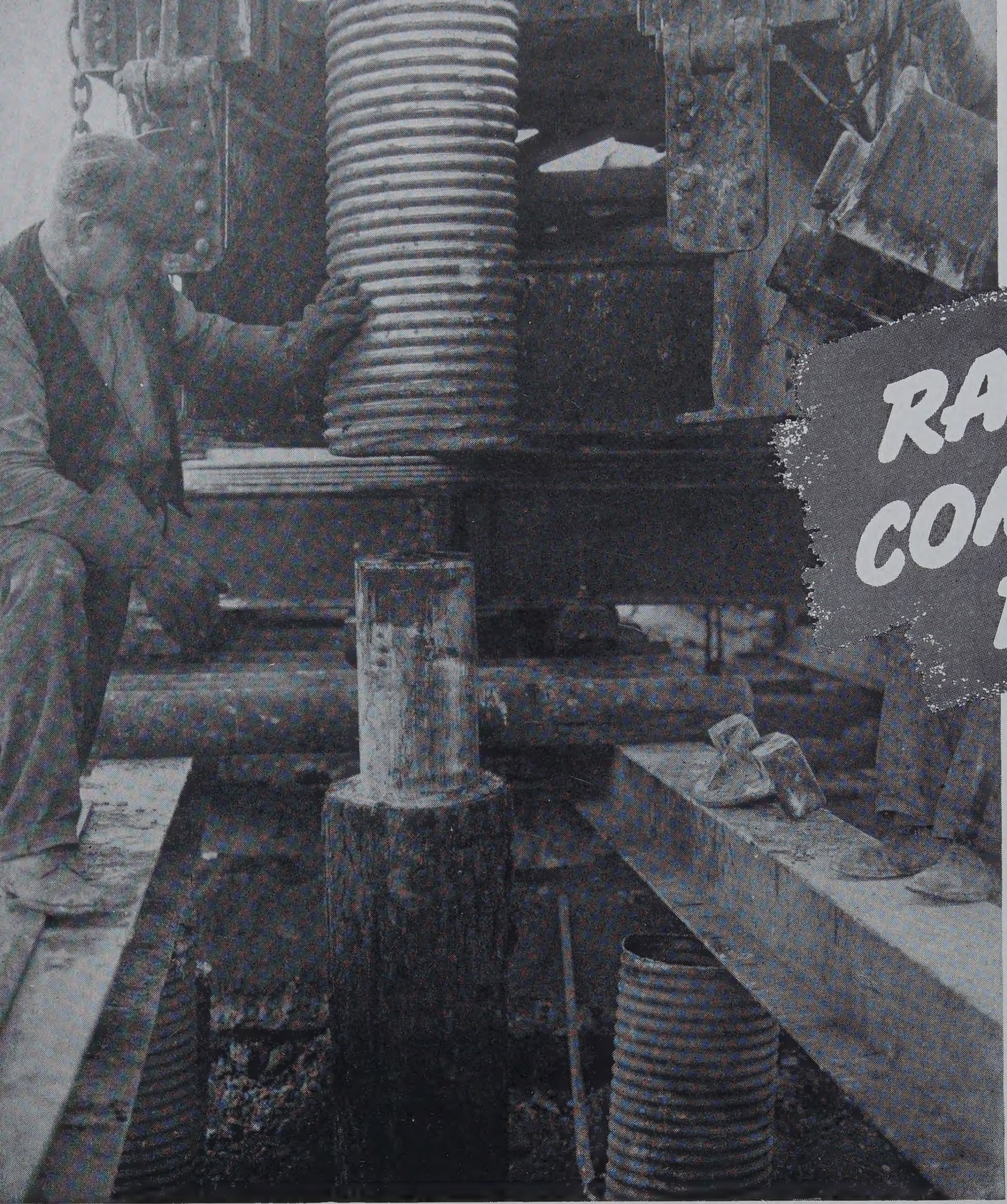
Next time you write floor specifications, consider Armstrong's Linoleum. It's a business-builder and money-saver that will pay off in performance and client satisfaction. You'll find full facts and installation data in "Sweet's." Or write direct to Armstrong Cork Co., Floor Div., 1213 State Street, Lancaster, Pa.

ARMSTRONG'S FLOORS
LINOLEUM

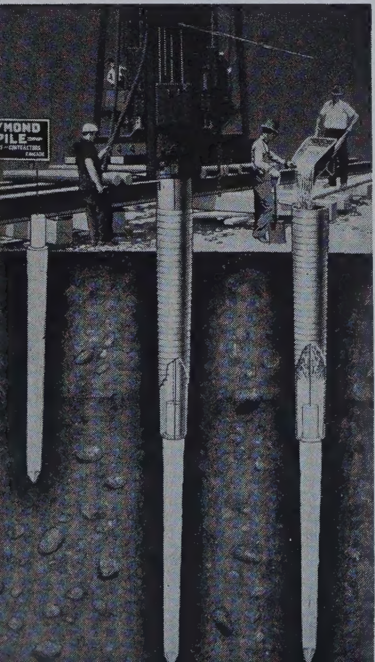
Rubber Tile - Linotile (Oil-Bonded) - Asphalt Tile - Cork Tile - Linowall Wall Covering

RAYMOND COMPOSITE PILES

...where groun
water level
is variable



Cut-away view of RAYMOND COMPOSITE PILES at successive stages of installation.



The Raymond Composite Pile is a cast-in-place concrete pile superimposed upon a wood pile, driven down to firm bearing . . . the top of the wood pile being below the lowest expected permanent ground water level.

The wood pile usually carries the load, while the concrete upper section (tightly lock-jointed to the wood) acts as a column through that portion of the soil not continuously saturated. Such use of a wood pile . . . *where there is assurance of permanency of saturation,* is sound practice and economical.

Inquiries about this and other Raymond services will receive prompt attention.

THE SCOPE OF RAYMOND'S ACTIVITIES *includes every recognized type of pile foundation—concrete, composite, precast, steel, pipe and wood. Also caissons, construction involving shore protection, ship building facilities, harbor and river improvements and borings for soil investigation.*

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COMPANY

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THRESHING FLOOR

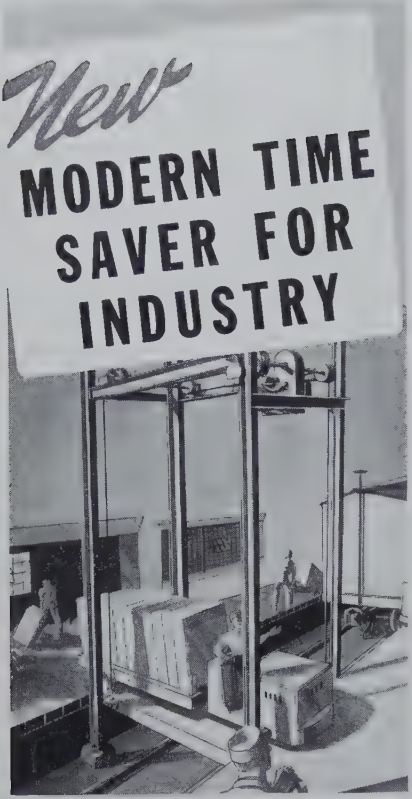
From Port of Spain, Trinidad, B.W.I., comes this interesting letter from JOSEPH L. HAUTMAN, *New York Architect, in charge of the architectural work on the Trinidad defense project for Caribbean Architect-Engineer. Hautman praises the work there of an up-and-coming delineator,* OTTO ERWIN LEIBIG, JR., *three of whose pencil studies are shown at the right.*

Designing and building U. S. Army air bases in the Caribbean district is quite different from World's Fair, U.S.H.A., or what have you. I must say that there is no end of interest to the work going on here. Starting from scratch in virgin jungle territory, cutting through to obtain topography, and then establishing principles of design for the best means and manner in which to live in the tropics—all adds to the zest and pleasure of working on a project this size. To do justice to a detailed description would require writing for months and fill volumes. I will leave that for some future date. Probably *Ralph Walker* has been giving first-hand information on the subject anyway, and I can in no way compete with his ability to describe "commuting to Cumuto."

Living here is something that really is worth while aside from the many pests such as ants, mosquitoes, bugs, snakes, ticks, tarantulas, and so forth. The place is just like perpetual spring. Even the rainy season is full of interest. Frankly, I don't see why the plutocracy of the United States missed this place especially during January, February, and March. I am sure that when it is found out, Bermuda, Nassau, and the islands farther north are going to lose their popularity.

Even though this is a field office, we have found time to encourage

Three of OTTO ERWIN LEIBIG'S *pencil studies are reproduced here at half their actual size. The sketches, from top to bottom: "Native Construction," "Santa Cruz Road," and "Savannah — Queens Park"*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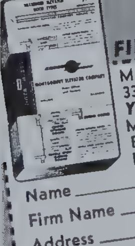

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fellows with individual talents. We have here *Otto Erwin Leibig, Jr.* I do not think you know him. His background has been Carnegie Tech, Civil Engineering course, one year, and Pratt Institute (Brooklyn, New York), Architecture, three years. He has shown marked ability with the use of the pencil and the brush. Even though there is a World War, I do not think we should lose sight of the fact that good pencil and water color delineators will be in demand when the war is over, just as much as they have always been before. Although everything here is so delightful, which makes time slip by quicker than one has ever known it before, we all have the hope of being together back in the States at some future date.

A. F. M. LANGE, *a retired Architect of Brooklyn, N. Y., comments on Lorimer Rich's criticism of the Smithsonian Gallery of Art.*

In the August number of PENCIL POINTS, *Lorimer Rich* has ably pointed out sufficient shortcomings in the accepted design for the Smithsonian Gallery of Art to bar its erection on the architecturally and otherwise beautiful Mall in Washington. But he ends his devastating critique, perhaps in a spirit of resignation (because nothing can prevent this fulfilment of the evident desire of a powerful clique of architectural anarchists to jar the feelings of the lovers of the architectural beauty of the Mall by deliberately funking all architecture in the sacred cause of functionalism in this outstanding building) by offering as consolation the fact that the Mall has four rows of elm trees, which will gradually, at the height of eighty feet, charitably hide this catastrophic monstrosity from the view of the pedestrians. The foliage of elm trees lasts about five months; during the remaining seven months of the year the citizens and visitors of Washington can, of course, avoid the Mall or wear blinkers when they pass the Smithsonian Gallery of Art.

The satanic ambition of the architectural strip-tease designers of the moment to control the client market if for only a short period (*après moi le dèluge*) with the denuding idea does not let them think so far as to realize that if this design represents the exterior of a museum of art, how can they denude architecture any further for, f.i., an industrial museum?

War shortages will produce changes in architectural design, points out ALBERT CHAS. SCHWEIZER, *Director of the Terminal Program of New York University School of Architecture, who was quoted recently in an interview published in the* NEW YORK WORLD TELEGRAM.

Wars still affect architecture, though not as they did in the Middle Ages, when every fellow's house was a fortress.

In the last war the airplane was developed, and airplane design was carried over into everything—automobiles, houses, furnishings, and gadgets. It made possible the universal "streamlining" we have heard so much about, and the modern styles in architecture and furniture. In this war the shortages of material are bound to control architecture; to force the architect to design and the public to accept entirely new methods and materials. The degree and speed of change will depend on the duration and intensity of the emergency.

In many defense centers they are putting up houses that are not only fabricated before erection but which can be taken apart and moved somewhere else. Many necessary things will go. Cellars, for instance, are expensive and in many cases you can do without them and use a heating plant on the first floor. Gadgets will be omitted. Better planning, with less waste, will become a necessity. In many cases houses will be made smaller as an economy measure.

Plastics are good, but expensive, and raw material for them may become scarce. Wood is probably the coming material, some in its natural state and much of it plywood and plastic wood, which can be made from cheap fiber and is highly adaptable. But while we'll use wood for many things we used it for twenty years ago, it will be in a different form and new design will make it acceptable.

SPEAKING OF DEFENSE

"There can be no completely coordinated determination of the ways and means of conserving the use of materials essential to defense production other than the application of Governmental control and a system of rationing, but it is incumbent on those interested in the continuance of private construction during the duration of the emergency to give all possible aid in conserving materials essential to defense construction."

Producers Council Bulletin

Dan Griffin Speaks for Steel . . .

Below are quoted the remarks of Dan F. Griffin, a steel worker in the Campbell Works of The Youngstown Sheet and Tube Company, made recently at a meeting of a Youngstown, Ohio, civic club. Reflecting the attitude of Youngstown employees, his words should be of interest to the users of Youngstown steel.

"Today, the eyes of the world are turned upon the ever-increasing conflagration in Europe. We realize that our nation has undertaken the gigantic task of transforming a peace-time nation into a nation geared to total national defense.

"The steel mill employee is playing an ever-increasing and more important role in this task; and the American steel man is tops in the industry.

"We know that as much depends upon the skill and devotion of these steel mill employees as on our armed forces on land, sea, and in the air. To a man, the steel mill employees of America appreciate they are among the highest paid workers in the world. Their working conditions are the best.

"The American steel worker has plenty of leisure time to do as he will. He can work in his garden; he can seek any form of entertainment, not only for himself but also for his family. He can study to improve himself, and quite frequently does. He is in no way limited.

"The highest office in our land has been occupied by men of the most humble birth. Freedom in America has never had a price, but its rewards are unlimited. Your steel mill employee knows that he cannot buy freedom—he must think freedom—he must work for freedom.

"We treasure our American way of life as we have it today. We're prepared to go to any lengths to preserve for ourselves and for our children that tranquility, that comfort, that peace, which we have enjoyed in years past.

"We're willing to pay our share in money or labor—yes, we are already lending. We want our boys to serve—they're already being trained for service.

"Our steel workers' creed should be an all-out effort to procure peace for ourselves and for the rest of the world. If we must work harder or longer to produce the steel necessary to insure that peace, then we're ready and anxious to do our bit, for in that way only do we serve.

"The Army needs steel—we'll make it.

"The Navy needs steel—we'll make it.

"The Air Force needs steel—we'll make it.

"The whole world needs steel, and steel workers will make it, for the real steel man is a true American. He will never do or think anything to jeopardize America. He will do everything in his power to preserve America for Americans and Americanism.

"We'll remember, always, that the men of the Army, the men of the Navy, the men of the Air Force, those defending democracy and the men of production are all ONE.

"We're 'Sammies' on guard!

"The U.S. in United States means US."

QUALITY
YOUNGSTOWN
SERVICE

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YOUNGSTOWN SHEET
AND TUBE COMPANY
YOUNGSTOWN, OHIO

Architects co-operate as STAINLESS goes into Defense

• Defense recognizes the great strength and toughness of stainless steels, and their remarkable corrosion and abrasion resistance. Both the Army and the Navy are using many grades of Armco Stainless Steels for an ever-increasing number of highly specialized defense requirements — from galley equipment on warships to fire walls on war planes. Priorities on stainless steel are likely to continue during the national emergency. And as long as the need is there, architects are co-operating to give the Government the right of way.

Yet there is certain to come a day when Armco Stainless again will be plentiful. You will have many future opportunities to apply it to the architectural uses it has now, as well as to others *yet to be developed.*

Meanwhile, you'll want to keep posted on Armco Stainless developments. Whenever questions come up about grades and their applications for special work you may be projecting, be sure to write for the latest information. We'll be glad to assist in every way we can. The American Rolling Mill Co., 2811 Curtis St., Middletown, Ohio.

MADE OF ARMCO STAINLESS STEEL

ARMCO STAINLESS STEELS

COMPETITIONS

AMERICAN ACADEMY

Because of present conditions in Europe, the American Academy in Rome has announced that it cannot send its Fellows to Rome for study and travel, and therefore no fellowships will be awarded next spring. However, in order to carry on the policy of aiding and stimulating American art, the trustees have decided to offer competitive and purely cash prizes in Architecture, Landscape Architecture, Musical Composition, Painting, and Sculpture totaling over $7,000. First prize in each field will be $1,000; second, third, and fourth prizes will be $100, $50, and $25 respectively. In addition, a prize of $25 will be awarded to each of the preliminary competitors who is chosen by the jury to enter the final competition.

Applications must be filed by January 1st in painting and sculpture; in the other three subjects by February 1st.

Information and entry blanks may be had on request from *Roscoe Guernsey,* Executive Secretary, American Academy in Rome, 101 Park Ave., New York.

GIRL WINS COOPER UNION PRIZE

A $1,000 scholarship for post-graduate work in Architecture and Civic Design has been awarded to *Miss Ann Sirotenko,* of West Orange, N. J., by the Advisory Council of the Cooper Union Art Schools, New York. Miss Sirotenko received the award in recognition of the excellence of her designs for large buildings, modern interior decoration, plumbing and sewage systems, and heating and ventilating units.

BRIDGE DESIGN

The American Institute of Steel Construction has announced its annual bridge design competition, open to bona fide registered students of structural engineering and architecture in recognized technical schools of the United States and its possessions. Cash prizes of $200, $150, and $50 are offered for designs placed first, second, and third respectively. Certificates, signed by the Jury of Award and officers of the Institute, will be awarded to the prize winners and to those who are given honorable mention.

The competition will close on February 10. Details may be had from the office of the Institute at 101 Park Ave., New York.

NO. 7

ALUMINUM, DEFENSE, AND YOU

THE TIMETABLE OF ALUMINUM FOR DEFENSE

up to September 10, 1941

1938

1938 Sept. *Munich.*
Oct. *Czechoslovakia invaded.*
Nov. Alcoa inaugurates $26,000,000 expansion program.
Dec. Alcoa produced 287 million pounds in 1938; had more than a year's supply on hand.

1939

1939 Jan. New extrusion and tube mill begins operation at Lafayette, Ind.
Feb. Start building an excess stock pile of airplane sheet.
Mar. *Bohemia and Moravia occupied.*
Apr. *Albania invaded; Congress authorizes Army to acquire 6,000 planes by July, '41, and Navy 3,000 by '44. Aluminum for all these would take about two months 1941 production.*
Sept. *Poland invaded; U. S. Neutrality proclaimed; limited National emergency proclaimed.*
Alcoa authorizes new metal-producing capacity at Alcoa, Tenn.
Nov. *Finland invaded; Cash-and-carry act signed.*
Alcoa completes $26,000,000 expansion program, begins plans for a larger one.
Dec. *U. S. protests blockade of German exports.*
New metal-producing plant authorized at Vancouver, Wash.
1939 production 327 million pounds; 215 million on hand.

1940

1940 Jan. *First request for defense appropriation in Budget Message.*
Alcoa announces $30,000,000 more plant expansion.
Mar. Alcoa reduces price of aluminum from 20c to 19c, starts construction of Vancouver, Wash., plant.
Apr. *Denmark and Norway invaded.*
May *Low countries invaded; National Defense Advisory Commission named.*
New metal-producing unit begins operation at Alcoa, Tenn.
June *Dunkerque; France capitulates.*
Additional metal-producing unit authorized at Alcoa, Tenn.
July *Congress lifts previous limits on numbers of planes.*
Aug. *Air offensive against England begins; 50 destroyers exchanged for island air bases.*
Alcoa reduces price of aluminum ingot from 19c to 18c; capacity for making alumina increased.
Sept. *Egypt invaded; Selective Service Bill passed.*
First metal manufactured at Vancouver, Wash., plant and new units for additional capacity authorized.
Oct. *Rumania invaded.*
Alcoa authorizes another $150,000,000 for expansion.
Nov. *26 bombers on contract turned over to Britain.*
Alcoa reduces ingot price from 18c to 17c; additional capacity authorized at Badin.
Dec. Alcoa 1940 production 413 million pounds; 154 million on hand.

1941

1941 Jan. *OPM established; NDAC says aluminum supply adequate to meet October, 1940, estimates of requirements.*
Alcoa authorizes additional capacity at Alcoa, Tenn.
Feb. *Aluminum put on priorities.*
Mar. *Lend-lease bill signed.*
Alcoa produces 44,000,000 pounds of metal this month.
Apr. *Yugoslavia invaded; U. S. occupies Greenland.*
May 150 million-pound-annual-capacity plant at Vancouver, Wash., completed and operating at capacity.
June *Crete lost; Russia invaded.*
July *New Government aluminum plants authorized; U. S. occupies Iceland; Japan moves into Indo-China.*
Alcoa produces 53,000,000 pounds this month; Badin unit authorized November, 1940 starts operation.
Aug. *U. S. Government announces Aluminum Company of America will build and operate 3 Government-owned aluminum smelting plants and one for making alumina.*
Alcoa announces ingot price reduction to 15c, effective October 1, 1941.
Alcoa and T. V. A. conclude agreement to unify two great hydro-electric power systems in the Tennessee Valley, which will add at least 200,000,000 pounds to America's annual aluminum producing capacity.
Alcoa produces 54,000,000 pounds of aluminum this month.
Sept. Sites selected for two of the Government-owned aluminum plants and for the alumina plant; railroad, water, and sewage facilities provided; construction contracts being executed.
Alcoa starts construction of 325,000,000 pounds per year additional alumina producing capacity at its own Mobile plant; construction started on additional capacity for 22 million pounds of aluminum fluoride, and 23 million pounds of cryolite annually at East St. Louis; eight new extrusion presses purchased to bring expansion up to 238% of pre-war capacity.
Excess stock pile of aluminum airplane sheet started in February, 1939, being maintained at 5,000,000 pounds.

ALUMINUM COMPANY OF AMERICA

Steelcrete

EXPANDED METAL
FIGURES PROMINENTLY IN
Defense Plans

Architects and Engineers everywhere, in the defense program, are specifying "Steelcrete" Expanded Metal for many uses in all types of

Defense Construction

"Steelcrete" Safe-T-Mesh
for
various types of Partitions, Enclosures, Guards, Ship Bulkheads, etc.

"Steelcrete" Flattened Mesh
for
various types of Guards, trays, baskets, shelves, racks, etc.

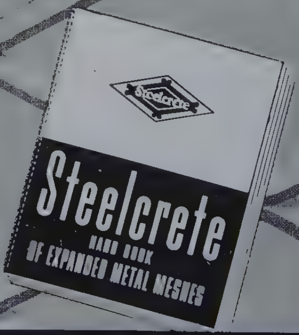
"Steelcrete" Walkway and Skywalk Mesh
for
various type of Catwalks, stairs, platforms, guards, etc.

"Steelcrete" Reinforcing Mesh
for
Surface or underground buildings, igloos, ammunition storage, etc.

"It's Wheeling Steel"

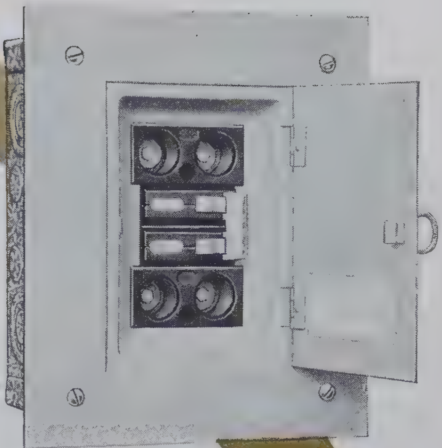
FREE

92-PAGE BOOK—Send for your copy of this interesting book on "Steelcrete" Expanded Metal. It has numerous photographs, drawings and specifications. A helpful data book for use when planning defense projects.

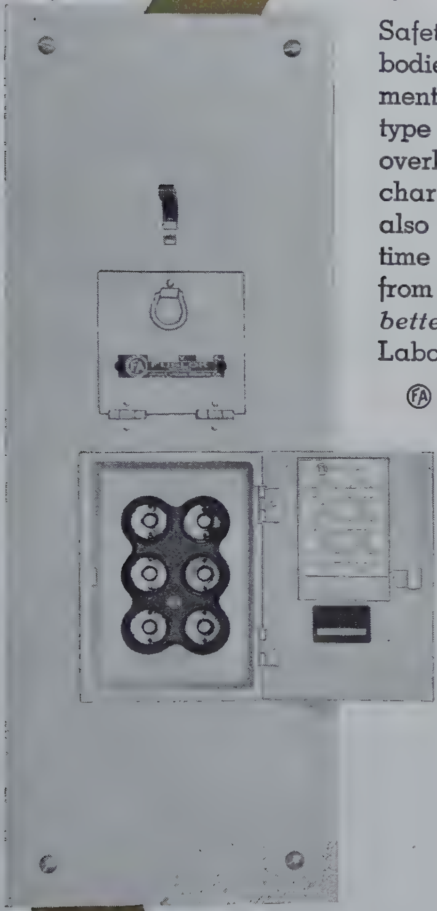


THE CONSOLIDATED EXPANDED METAL COMPANIES
WHEELING, WEST VIRGINIA
Offices and Warehouses:
Buffalo • Minneapolis • Detroit • Cincinnati
New York • Chicago • Cleveland • Pittsburgh • Philadelphia • Boston • Houston • Atlanta • St. Louis • Dallas
Export Office: 330 West 42nd Street, New York, N. Y.

Whatever the need for
SERVICE EQUIPMENT—
Ⓕ *can supply it!*



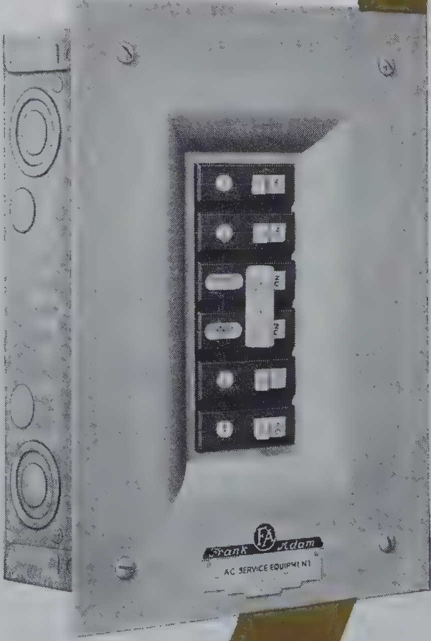
Combination Type Ⓕ Service Equipment with Ⓕ Type AC Circuit Breaker Main, and Plug Fuse type Branch Circuits. Cat. No. SE353-P4F



Ⓕ 6-Circuit Safety-type Service Equipment with 60 Amp. Tumbler Main Switch and Fuse. Bell Transformer space optional. Cat. No. SE636F

Safety and modern protection are embodied in each piece of Ⓕ Service Equipment. Both circuit breaker type and fuse type protect circuits against harmful overload. Because of the proper time lag characteristics of circuit breakers, and also the improved type of non-tamperable fuses with greater time lag characteristics, they prevent annoying interruptions from momentary overload. All Ⓕ Service Equipment is *built better than necessary*—and approved by Underwriters' Laboratories.

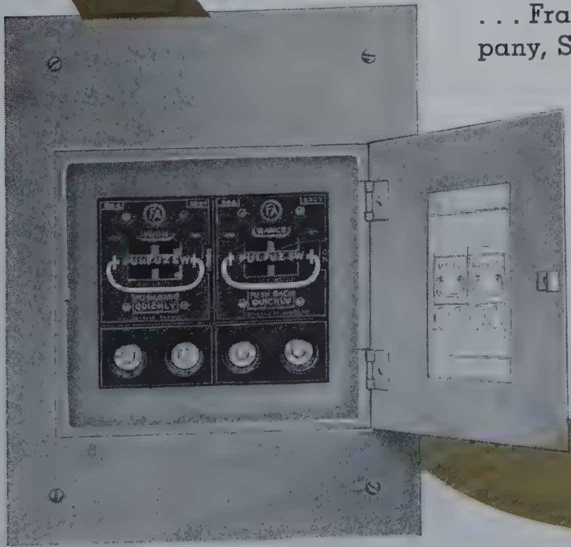
Ⓕ Service Equipment is assembled from *standardized* molded sections—installed in *standardized* cabinets—with ample *standardized* knockouts. This *standardization* improves the product, lowers the cost and expedites deliveries. Spacious gutters are provided for ease in wiring . . . Available for either flush or surface mounting, they are pleasingly designed, and the fronts are finished in attractive pearl gray lacquer.



Ⓕ Service Equipment with Ⓕ D.P. 35 Amp. AC Circuit Breaker for range circuit, and 4 S.P. AC Circuit Breakers for light and appliance Branch Circuits. Cat. No. SE41-3L7F

There is a Wholesaler near you

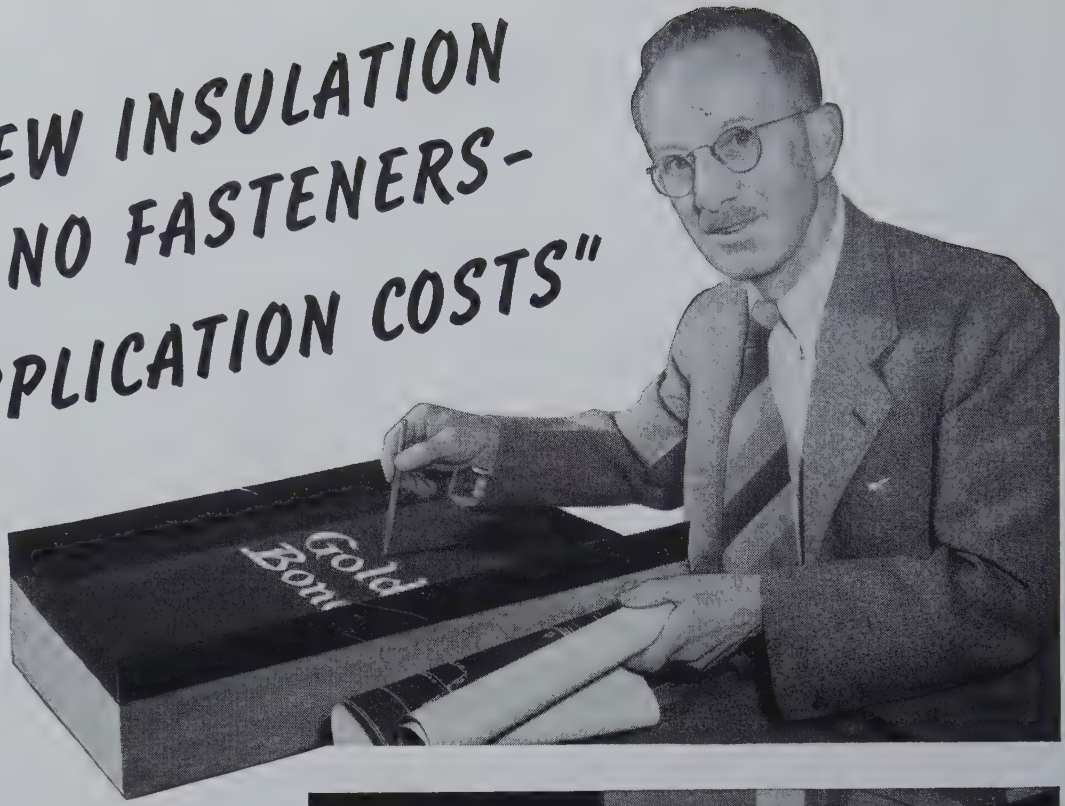
who carries Ⓕ Service Equipment in stock, for prompt delivery. Write for his name and address—and for complete catalog data . . . Frank Adam Electric Company, St. Louis, Mo.



Ⓕ Service Equipment with Main Switch, Range Circuit and four Lighting Branch Circuits. Cat. No. SE63PF4-6XF

THE SIGN OF A Ⓕ BETTER JOB
EST. 1891
Frank Adam
1891 FIFTY YEARS SERVICE 1941
FRANK ADAM ELECTRIC CO.
ST. LOUIS, MO. U.S.A.

"THIS NEW INSULATION NEEDS NO FASTENERS— CUTS APPLICATION COSTS"



Says Architect
HARRY F. HUDSON,
of Buffalo, New York.

GOLD Bond's new semi-rigid rock wool insulation batt saves both time and money—because it is quickly installed without staples, wiring, or any other kind of fastener. It cuts costs—and it's a *better* batt, too. Backed with an asphalt-impregnated fibre-skin liner to resist moisture—it's fireproof, vermin-proof, and light in weight. High insulating efficiency is guaranteed by uniform density, weight and thickness—and it can't rot, settle, or deteriorate.

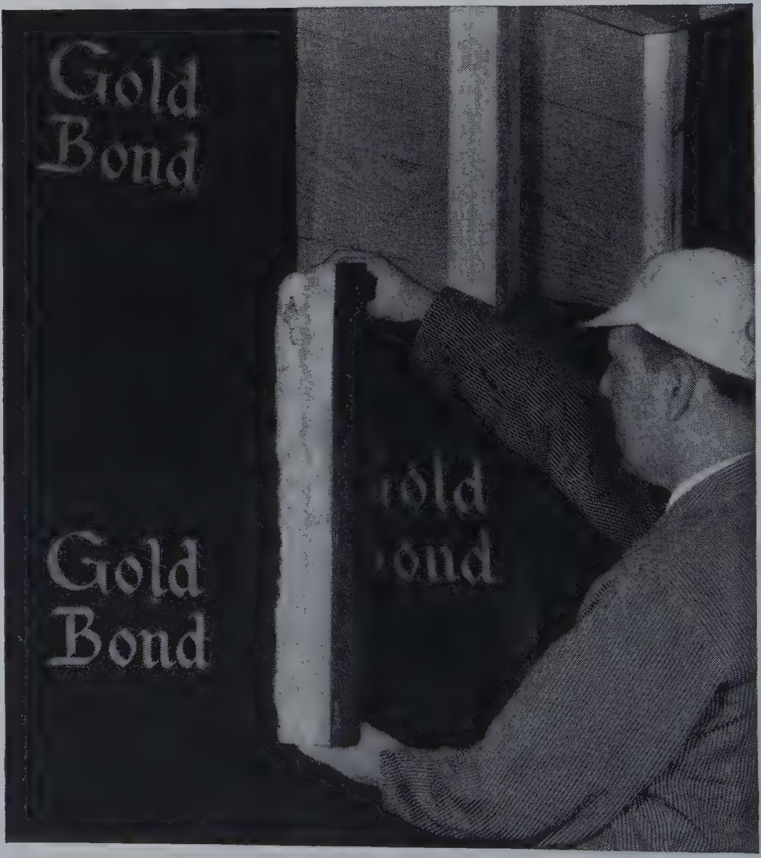
Gold Bond First With The Best

This improved new batt is just one example of how Gold Bond sets the pace for the industry. Another is the Gold Bond completely sealed rock wool blanket, available in 3 thicknesses, and providing one-piece insulation from floor to ceiling. National Gypsum research has developed more than 150 other *better* Gold Bond products for every type interior—including plaster, wallboard, lime, metal and gypsum lath, wall paint, sheathing, and sound control products. And when you specify Gold Bond exclusively, complete responsibility for *all* products is centered with *one* organization—the world's largest exclusive manufacturer of wall and ceiling materials. Consult the Gold Bond Section of Sweet's, or write today for 1941 Gold Bond Handbook, containing details on new and better methods of wall and ceiling construction. National Gypsum Company, Buffalo, New York.

BUILD BETTER WITH

Gold Bond

Everything—for walls & ceilings



CARPENTERS PREFER GOLD BOND SEMI-RIGID BATTS *because they're faster and easier to install. You save time and money on the job, and get an efficient fireproof insulation that means permanent satisfaction to the home owner.*

Producing units at:

NEW YORK, N. Y. . . CLARENCE CENTER, N. Y. . . AKRON, N. Y. . . PORTSMOUTH, N. H.
NATIONAL CITY, MICH. . . FORT DODGE, IA. . . MEDICINE LODGE, KAN. . . ROTAN, TEX.
SAVANNAH, GA. . . LUCKEY, O. . . BELLEFONTE, PA. . . YORK, PA. . . ORANDA, VA.
SALTVILLE, VA. . . NILES, O. . . MOBILE, ALA. . . NEWBURGH, N. Y. . . ALEXANDRIA, IND.
DUBUQUE, IA. . . DOVER, N. J.

More Value For Your Wall Money...

Read what you can do with permanent Linowall at about half your usual wall costs!

HERE'S a modern wall finish you should know about. It's Armstrong's Linowall—a permanent, linoleum-like material that costs only about half as much as other permanent finishes.

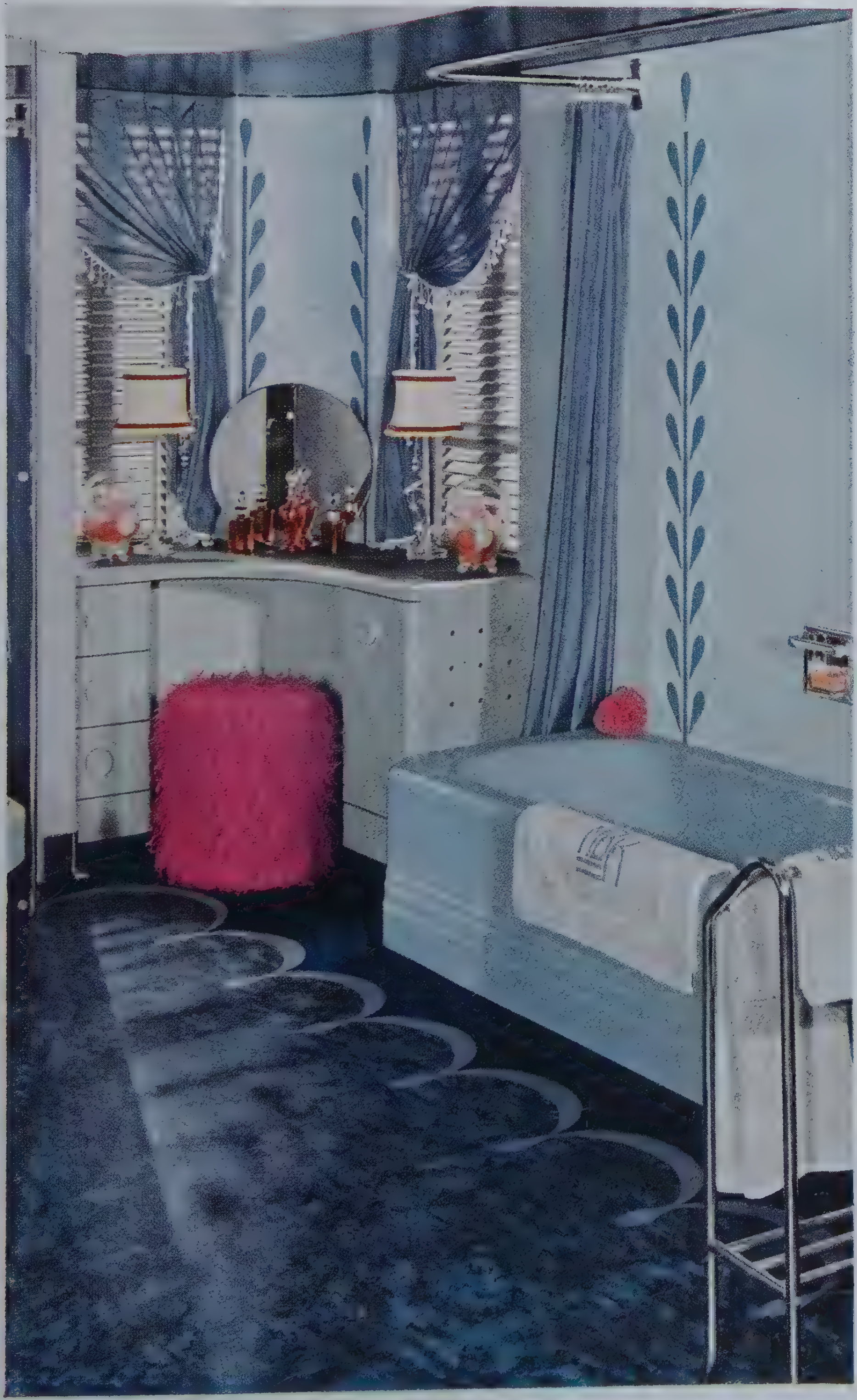
With this truly washable wall covering, you can make your houses much more attractive without adding to their cost. For example, you can have *a bathroom and a kitchen* finished with Linowall, instead of only one room finished with more expensive permanent materials. Or you can have special inset designs as illustrated.

Then there's the news value of Linowall to consider. People want new things—beautiful things—practical things! Linowall combines all three. Thirty-one eye-catching colorings are yours to choose from—plains, wood grainings, burled and marbleized effects. In addition, Linowall can be inexpensively inset with linoleum, wood, metal, glass, or plastics. Being flexible, it can be streamlined over corners.

Never Needs Refinishing

Women like Linowall because a damp cloth removes spots and ordinary stains; because Linowall resists denting and cracking; and because the rich colors do not wear off. Expensive refinishing is never necessary.

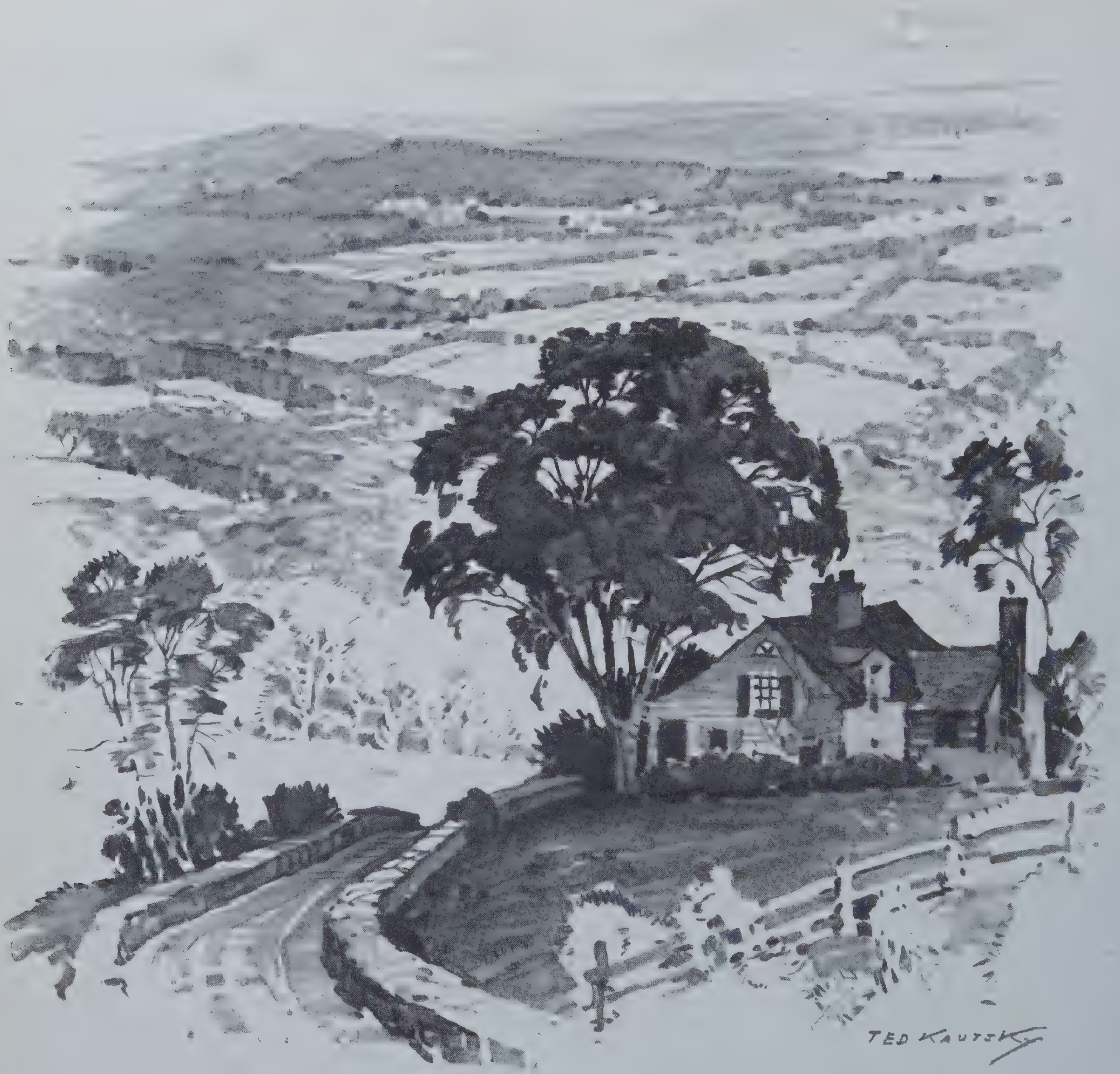
Why not get complete facts about Linowall now? See *Sweet's*, or write today for *Walls of Enduring Beauty*. Armstrong Cork Company, Floor Division, 1232 State Street, Lancaster, Pa.



COLONIAL BLUE LINOWALL *inset with a vine motif in heavy gauge blue linoleum gives this bathroom distinctive, practical walls. This is just one example of the countless design possibilities you have in Linowall. These walls are money-saving, too—easily washable, waterproof, permanent. The floor is Armstrong's No. 025 Marbelle Linoleum.*

ARMSTRONG'S LINOWALL

Made by the makers of Armstrong's Linoleum

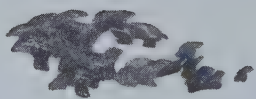


VENUS *Drawing* PENCILS

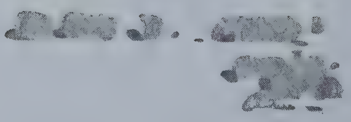
VENUS DRAWING Pencils are made in 17 degrees, 6B softest to 9H hardest, and VENUS TRACING Pencils—for direct tracing and blue print work—in 3 degrees, T1, T2 and T3.

We shall be glad to send you samples in any degree you wish.

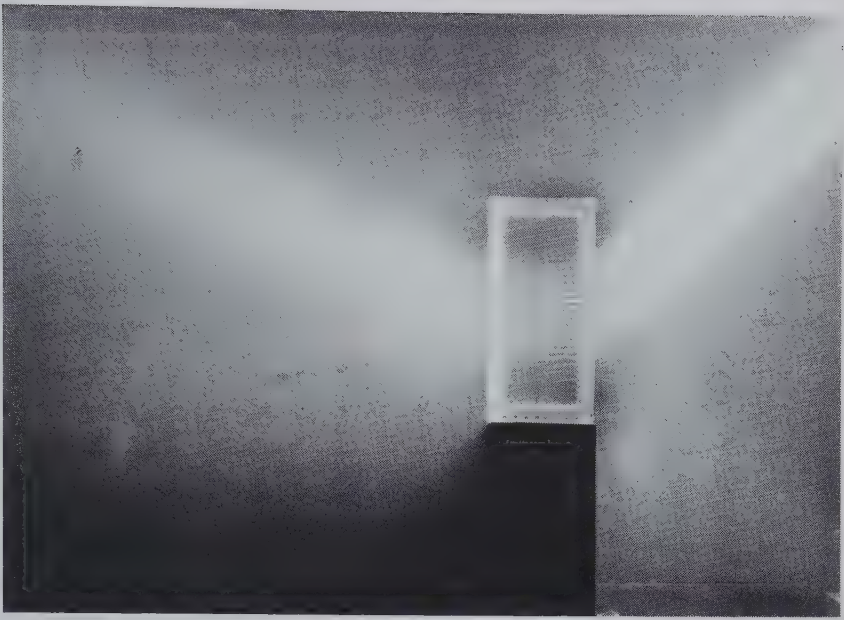
AMERICAN PENCIL COMPANY
502 Willow Avenue
HOBOKEN, N. J.
Venus Pencil Company, Ltd., Toronto
Venus Pencil Company, Ltd., London



A. The characteristic form of the elm tree in the foreground is indicated by using the flattened point of a Venus 6B. The sharp silhouettes of the foliage were also drawn with the flattened pencil point, giving it a slight twist and using pressure on the edges.

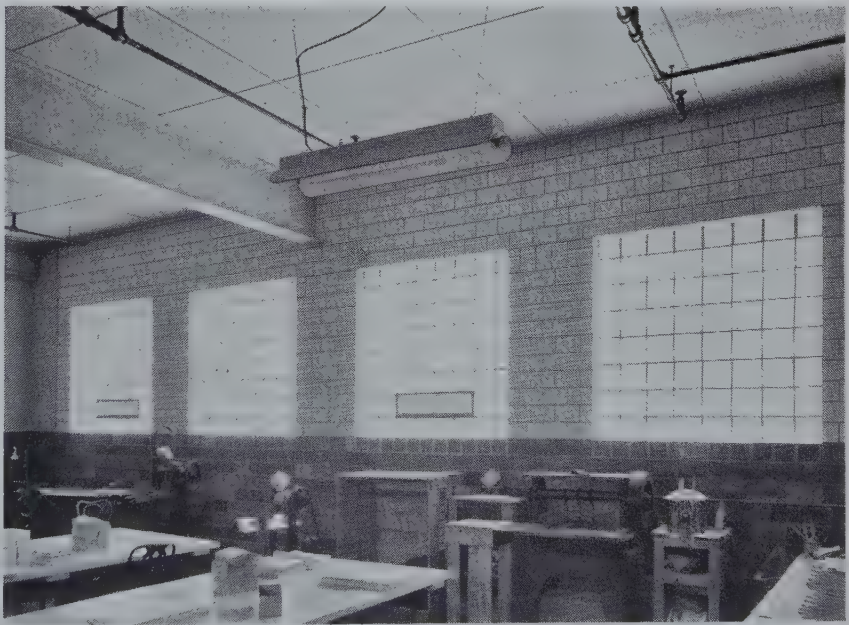


B. The trees on the rolling hills in the background were drawn with short, curved pencil strokes of a flattened Venus 2B point. Note the light and shade and the many colors suggested by varying the pressure of the strokes.



THE PRODUCT: This unretouched photograph shows how INSULUX Prismatic Glass Block No. 351 refracts light upward to the ceiling, giving indirect daylighting that provides more usable light throughout an interior. Note angle at which light is refracted upward at left—also the diffusion. No. 351 blocks are used above eye-level to light deep interiors without objectionable glare. A companion block, the No. 350 No-Glare, is used below eye line.

INDIRECT DAYLIGHTING: INSULUX PRISMATIC BLOCKS REFRACT LIGHT TO CEILING, PROVIDE MORE USABLE DAYLIGHT

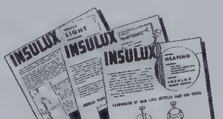


APPLICATION: Photograph at right shows INSULUX Prismatic Blocks used to give good distribution of daylight in bindery of printing plant. Photograph taken at 2:30 p. m., April 22, in St. Louis, with sun shining directly on panels. Top five courses are INSULUX Prismatic Blocks, No. 351; bottom three courses are INSULUX No-Glare Blocks, No. 350. Result: an abundance of light directed to the ceiling where it is reflected downward to provide efficient, even daylighting of entire bindery, without objectionable glare even though panels get intense sunlight. Owens-Illinois Glass Company, INSULUX Division, Toledo.

YOU GET IMMEDIATE DELIVERY ON INSULUX GLASS BLOCKS!

OWENS-ILLINOIS
INSULUX
Glass Block

3 NEW FOLDERS ON INDUSTRIAL PROBLEMS



Mail coupon for 3 *new*, informative folders on the use of INSULUX Glass Blocks in solving problems in (1) Light, (2) Heating, (3) Maintenance. All are crammed with factual data that aids in industrial planning.

OWENS-ILLINOIS GLASS COMPANY,
INSULUX Division,
27tl. Floor, Ohio Bldg., Toledo, Ohio

Gentlemen: Please send, without obligation, your 3 *new* folders on (1) Light, (2) Heating, (3) Maintenance.

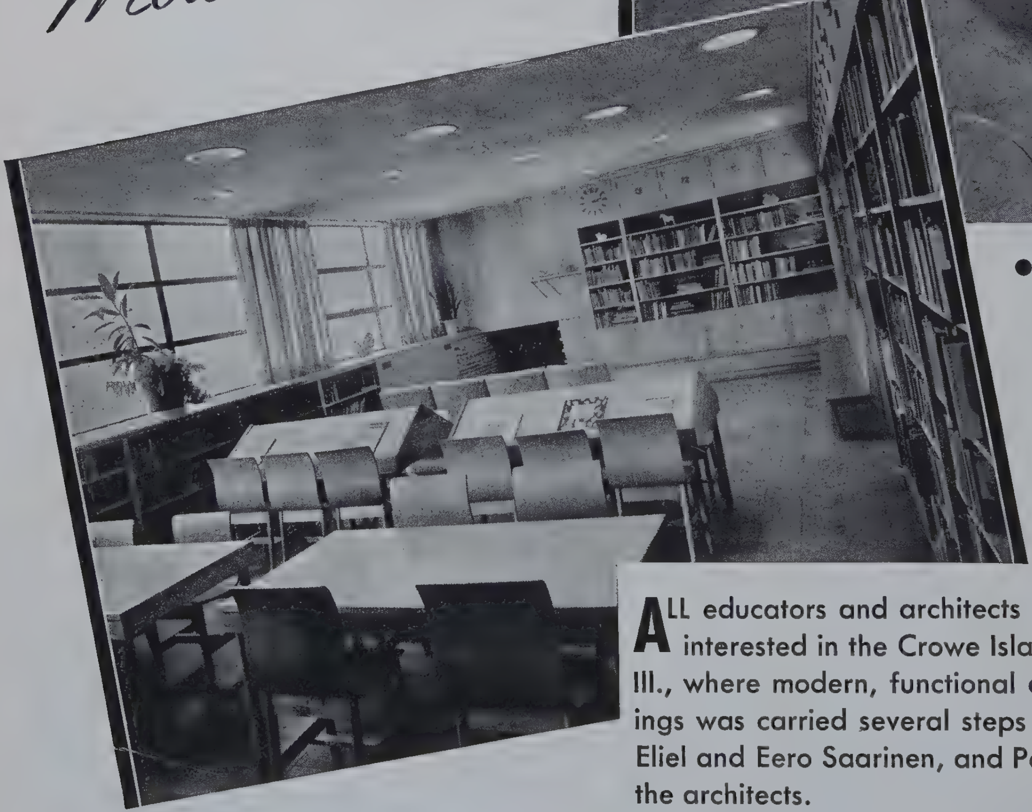
Name____________________

Address____________________

City__________State__________

All DESKS AND TABLE TOPS *are* FORMICA *in this Modern School!*

Formica Desk Tops with H 901 linen finished Formica Surfaces. This surface will stand washing with strong antiseptics if necessary; it is very easily kept clean.



This photo shows Formica Table Tops in the school library. Formica was used for this purpose also in the annex to the Library of Congress.

ALL educators and architects who design schools are interested in the Crowe Island School at Winnetka, Ill., where modern, functional design for school buildings was carried several steps forward in the work of Eliel and Eero Saarinen, and Perkins Wheeler and Hill, the architects.

We think it is significant that in this outstanding modern school Formica top surfaces were used on the table tops and desks throughout the building. It was used because of its attractive appearance, depth of color, the ease with which it is kept clean, and its long life without maintenance. The color used at Crowe Island was tan linen pattern.

Let us send you literature showing colors and methods of applying Formica.

The Formica Insulation Co., 4621 Spring Grove Ave., Cincinnati, Ohio

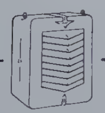
FORMICA FOR FURNITURE AND FIXTURES

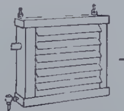
It goes without saying that you'll want smart design, to blend with attractive interiors, when you select unit heaters. *But,* you're buying HEAT not ornaments, so *look inside.* That's where the differences show up – vital differences in performance under actual working conditions.

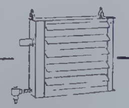
Thermoliers are made in three types to meet varying requirements. Regardless of the outside dress, these are the reasons why they are the most efficient heating machines. . . .

1. Exclusive *Internal Cooling Leg* which assures continuous rather than intermittent drainage of condensate, keeps *all* of the heater working *all* of the time, and saves 100 feet of exterior cooling piping.
2. *U-Shaped Tubes* which eliminate expansion strains the simplest way.
3. *Positive Built-In Drainage.* Every tube is pitched for complete drainage of condensate.
4. *Superior Fin Design* – square fins instead of round . . . 24% more radiating surface. Dirt and lint collection is reduced to a minimum.

— And many others.

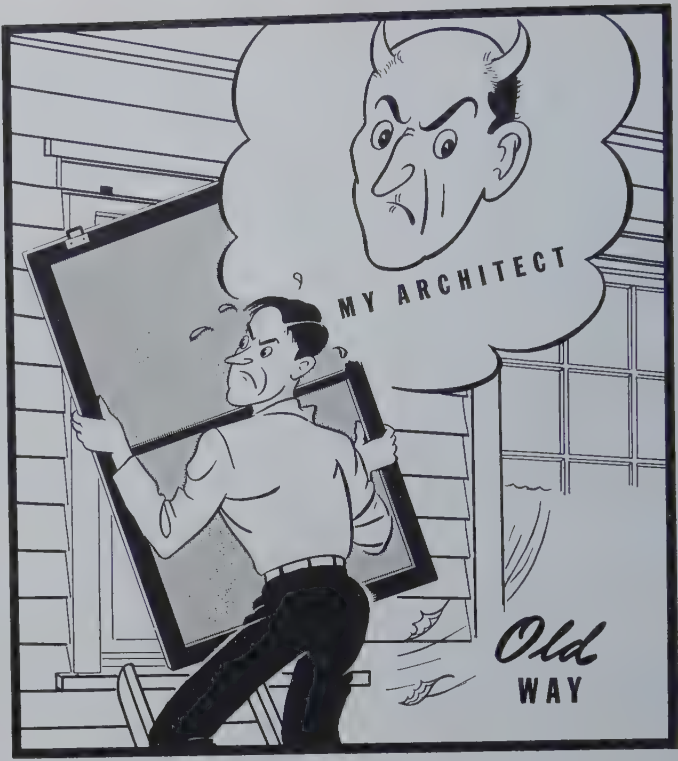

DeLuxe


Industrial


Factory

See Sweet's Catalog or write for complete Data Book explaining all features of Thermoliers. Grinnell Company, Inc., Executive Offices, Providence, R.I. Branch offices in principal cities.

GRINNELL
THERMOLIER
THE UNIT HEATER WITH 14 POINTS OF SUPERIORITY



When fall comes—
DO YOUR CLIENTS THINK OF YOU?

ANOTHER *Pella* TIME AND LABOR SAVER
Pella Dual Glazing can be left in place all year round. Need only be removed for occasional cleaning. Practically invisible when installed.

They'll think favorably of you if you have specified Pella Casements with built-in ROLSCREENS and DUAL GLAZING

Because they are the only *complete* windows. They eliminate the annual fall nuisance of taking down old fashioned window screens, since ROLSCREENS roll up and down like a window shade and are operated from the inside. Once in place—always in place. They can be raised or lowered in less than one minute. No painting, repairing or storing. Quality built—*guaranteed for 10 years.* Practically invisible, they preserve the beauty of the window effects you create. (Rolscreens are also available for other makes and types of windows).

DUAL GLAZING — eliminates the nuisance created by putting up and taking down outmoded storm windows. Consist of a removable, single panel of Libbey-Owens-Ford DSA glass, set in rubber-lined cadmium plated steel frame mounted on wood sash with hinged clips. Efficiently insulates against summer heat as well as winter cold.

PLUS THESE OTHER IMPORTANT FEATURES — Pella Casements have welded Steel Frame of 16 gauge rust-proofed galvannealed steel, full jamb width 5-5/16″, wood lined with clear White Pine on all four sides (other woods if desired). Sash is genuine White Pine toxic treated. They fit all types of window construction. Weatherstripping is exclusive Pella design, made of Alumiseal (a special tempered aluminum alloy) compression type and adjustable. Installed so you can see it work. Not affected by painting.

Write today for your FREE set of complete Pella Casement scaled details that will save you costly drafting time. Also "Window Idea" Booklet. Address ROLSCREEN COMPANY, Dept. 1101, Pella, Ia.

Pella CASEMENTS

WITH BUILT-IN ROLSCREENS AND DUAL GLAZING

THE PHOTOMETER SAYS "TRINITY WHITE IS WHITEST"

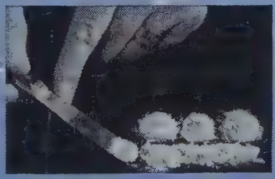
To the untrained eye there may appear to be little difference between various brands of white portland cement. But to the sensitive eye of the Zeiss Pulfric Photometer there *is* a difference—to it Trinity White Portland Cement is the whitest of white portland cements.

To the architect who wants a stucco that seems to glow from within—a terrazzo where the natural beauty of the colorful marble granules is given full play—cast stone that is radiantly alive—the answer is Trinity White.

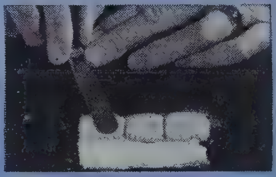
For Trinity White is not only "the whitest white." It has a scarcely discernible rubescence that gives any product made from it warmth and life. TRINITY PORTLAND CEMENT CO., Republic Bank Bldg., Dallas, Texas.

FREE—*A Sample of Trinity White!* So that you can prove to yourself that Trinity White is "the whitest white" portland cement, we'll gladly send you, free of charge, a full quart can of this *new* white cement. The coupon below will bring it to you. Send for it today.

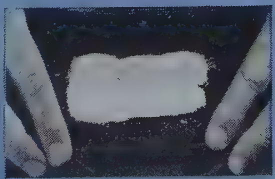
PROVE TO YOURSELF THAT TRINITY WHITE IS "THE WHITEST WHITE" WITH THIS SIMPLE TEST



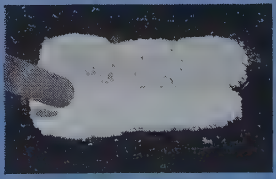
Make small pyramidal piles of the 3 other "white" cements side by side. Parallel them with a ridge of Trinity White.



Flatten them with a spatula or letter opener so that each pile is approximately 3/8" thick and the edges of all four piles nearly meet.



Place a piece of smooth, dry glass lightly on top of the dry samples to obtain complete contact with entire area of samples.



In good light, compare colors of samples. Note the exceptional whiteness of Trinity and its faint, hardly discernible rubescence.

TRINITY WHITE
PORTLAND CEMENT
PLAIN OR WATERPROOFED

Trinity Portland Cement Co.
Dept. PP-10, 111 West Monroe St., Chicago, Ill.

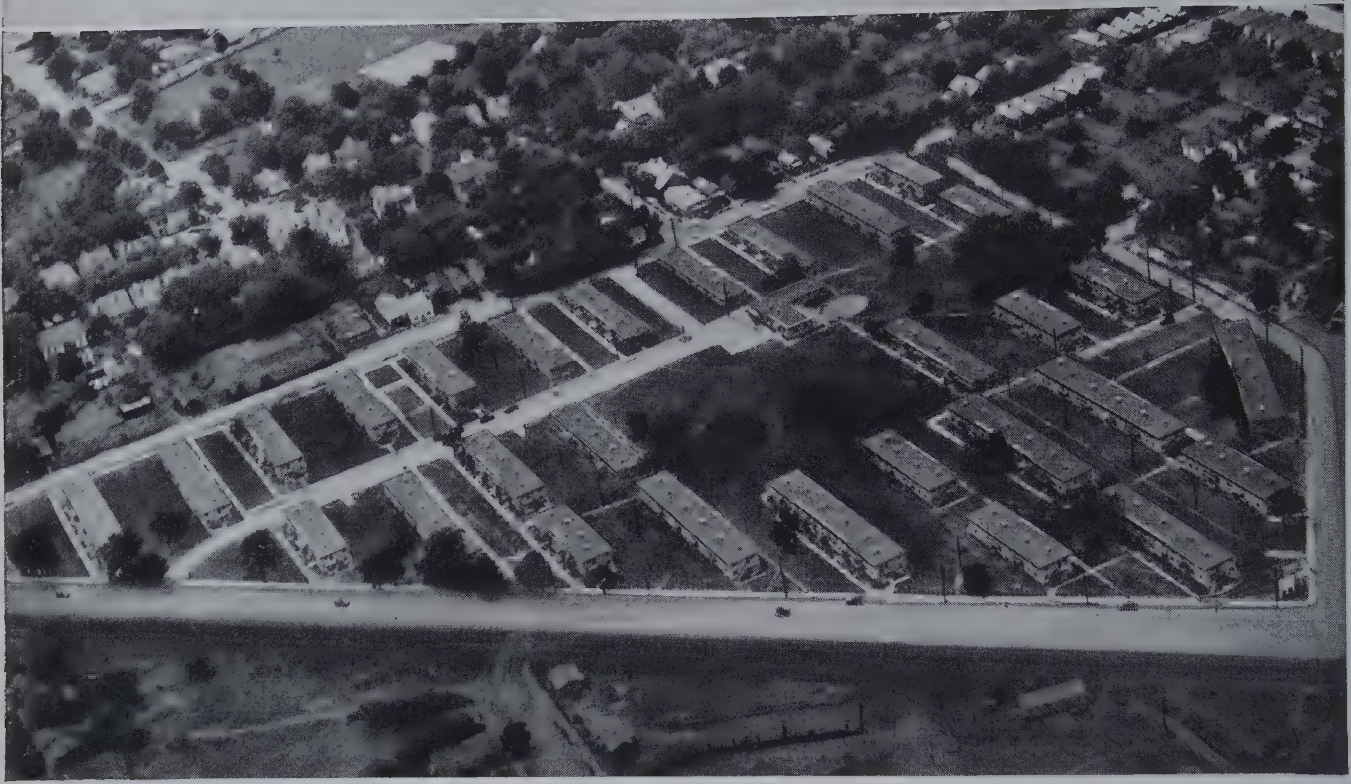
Send me, free of charge, a sample of Trinity White Portland Cement—so that I can prove to myself it is "the whitest white." I am an ☐ architect ☐ draftsman ☐ contractor ☐ dealer

Name ________________

Address ________________

City ________________ *State* ________

RU-BER-OID BUILT-UP ROOFS protect another housing project



Gilbert Manor Housing Project, Augusta, Ga. Protected with 129,300 sq. ft. Ruberoid Coal Tar Pitch and Asbestos Tarred Felt Built-up Roofing. Owner, Augusta Housing Authority. *Architect,* Merry & Parsons. *General Contractor,* Claussen-Lawrence Construction Co. *Roofing Contractor,* Augusta Roofing & Metal Works.

Whether its North, East, South or West—regardless of climatic conditions—more and more Ru-ber-oid Built-up Roofs are being specified. There are many reasons for this trend. Foremost is the completeness of Ruberoid's line of built-up roofing.

Ruberoid makes not one but all three major types of built-up roofing: (1) Asbestos, (2) Asphalt and (3) Coal Tar Pitch and Felt, and in a wide variety of weights and finishes. Architects can choose not only the type but the specification that best adapts itself for each job. Roofs can be custom-built to climatic conditions, the anticipated life of the building, fire hazards, fumes, etc. — and when applied by approved roofing contractors, may be bonded for 10, 15 and 20 years for both materials and workmanship.

When you have a job on the boards where roofing counsel is desired, call in a Ruberoid engineer. His services are free. Because the Ruberoid line is complete, his recommendations are unbiased. For popular specifications, consult Sweet's. For complete specifications, write us on your letterhead please. Address The Ruberoid Co., 500 Fifth Avenue, New York, N. Y. Department P.P.-10.

Reg. U.S. Pat. Off.

RU-BER-OID

ROOFING AND BUILDING PRODUCTS

Reg. U.S. Pat. Off.

TONCAN IRON PIPE selected for new

Tiffany & Co. Building

Tiffany & Co. Building, New York, N. Y.

Cross & Cross, Architects; J. Gordon Carr, Con-
ulting Equipment Designer; Jaros, Baum & Bolles,
Consulting Mechanical Engineers; Clifton E. Smith
nd Edward B. Silverman, Consulting Electrical
ngineers; Weiskopf & Pickworth, Consulting
tructural Engineers; Turner Construction Co.,
General Contractor; Baker-Smith & Co., Inc.,
New York, Air Conditioning Contractor.

erger Steel Lockers—another Republic Steel
roduct—also were installed in this building.

In planning the beautiful new Tiffany & Co. Building, built at a cost of well over a million dollars as the home of the world-famous New York jewelers, Toncan* Iron—the rust- and corrosion-resistant pipe—was selected for the condenser water lines of the air conditioning system which was installed as part of the basic construction.

When Toncan Copper-Molybdenum Iron was specified for that part of the system—probably the most modern ever devised for a major store building—which is subjected to severest corrosive attack, the owners got more than just pipe. They got *insurance against early failures and costly repairs.*

Toncan Iron is an alloy of open-hearth *iron,* molybdenum and copper—twice as much copper as can be found in the finest copper-bearing steel—giving it the highest rust- and corrosion-resistance of any ferrous material in its price class. That important quality is more than skin deep; it prevails all the way through the pipe wall—for a longer life of satisfactory service.

Every building owner should be genuinely interested in these economical service features of Toncan Iron. Recommend it to your clients for all pipe installations where corrosive conditions exist.

*Reg. U. S. Pat. Off.

For all the advantages and applications of Toncan Iron Pipe in the construction field, get booklet 333-R, or see Sweet's 27/3. Facts about other products in the wide line of Republic steel and steel building materials are found in Sweet's—Republic sheets 13/6; Steel and Tubes 23/5; Berger 9/1, 21/3, 21/21, 24/1, 28/5; Truscon 15/20.

REPUBLIC STEEL CORPORATION

General Offices: Cleveland, Ohio

Berger Manufacturing Division • Culvert Division
Niles Steel Products Division • Steel and Tubes Division
Union Drawn Steel Division • Truscon Steel Company

REPUBLIC TONCAN IRON

An alloy of refined open-hearth iron, copper and molybdenum—*that grows old slowly*

Tile-Tex comes well recommended

Y. M. C. A., Norfolk, Va.

Below: University Club, St. Louis, Mo.

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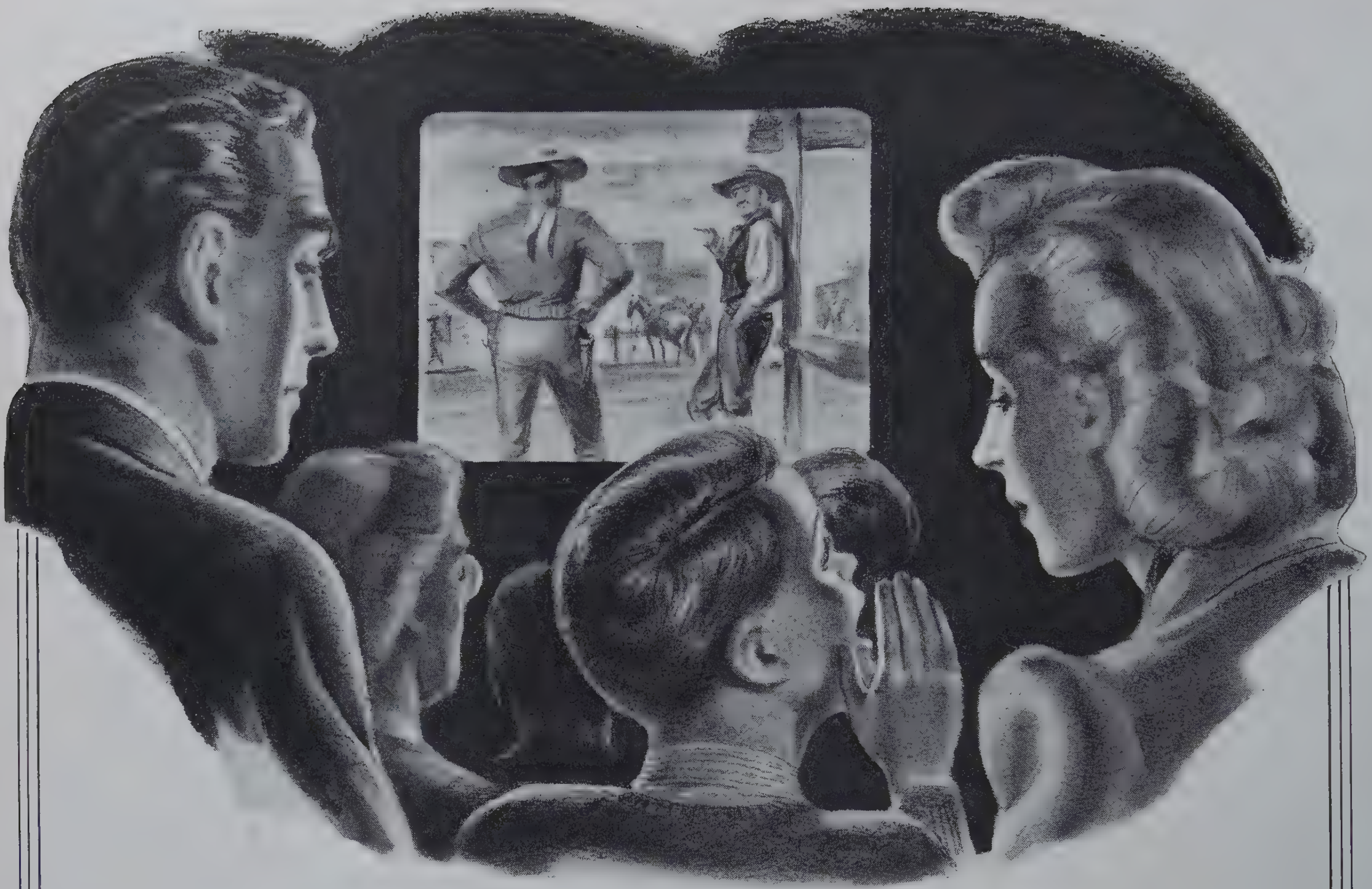

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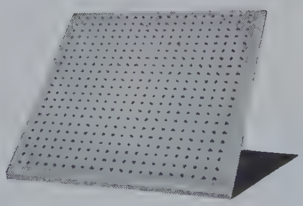

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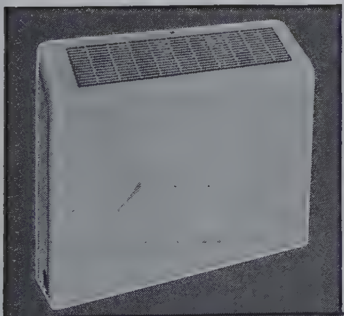

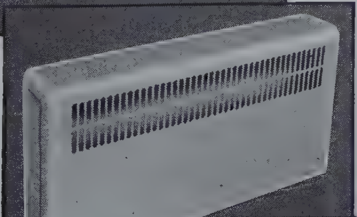

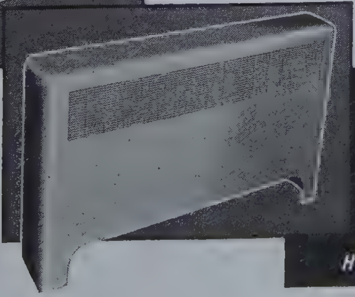

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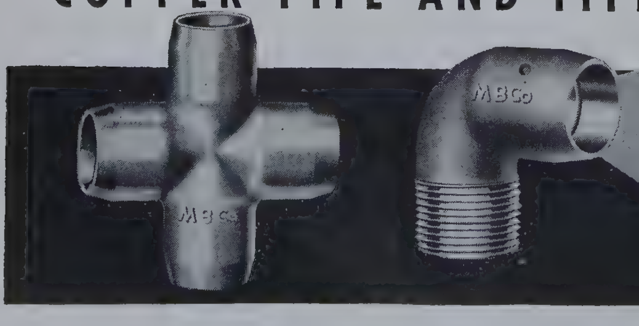

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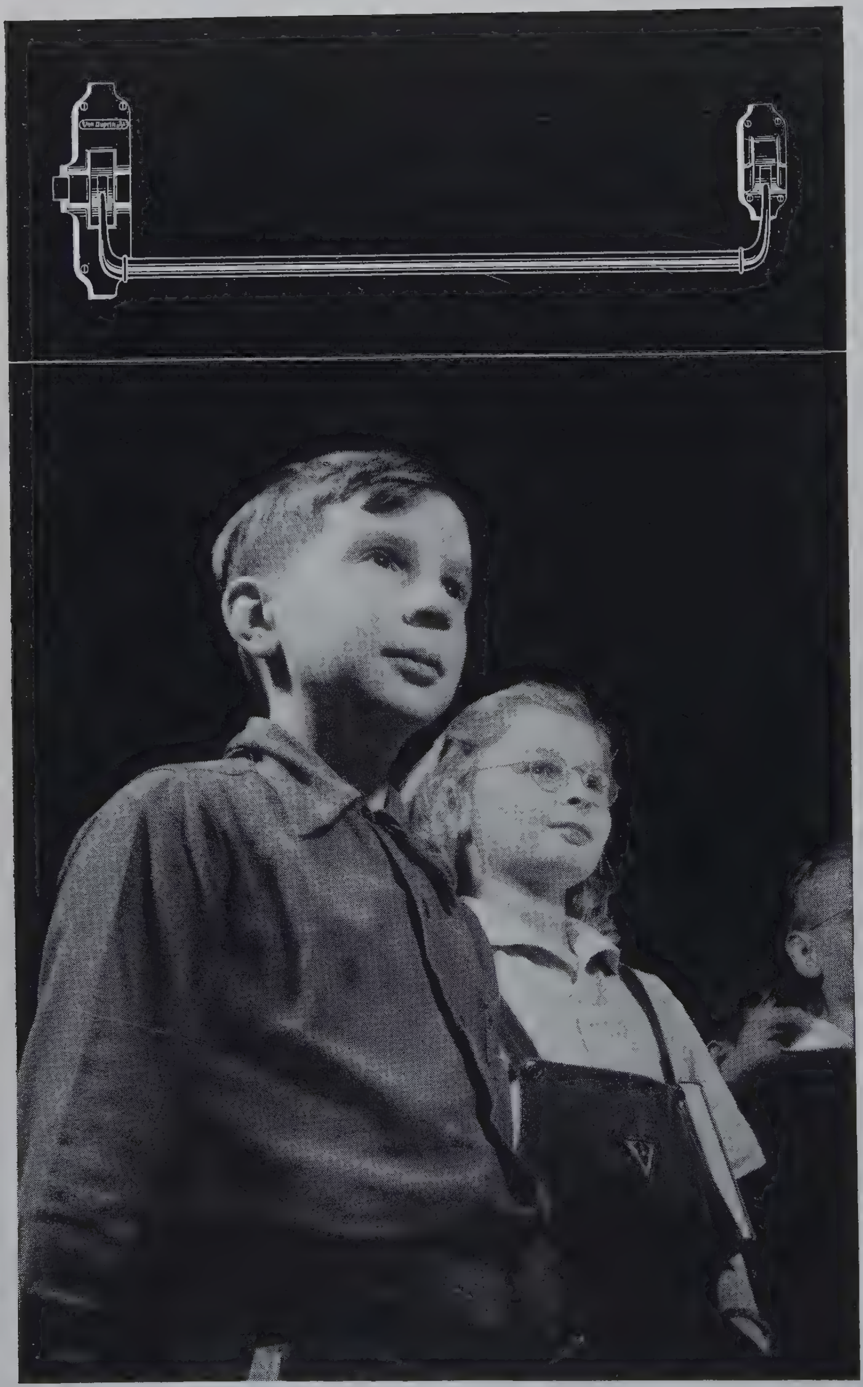

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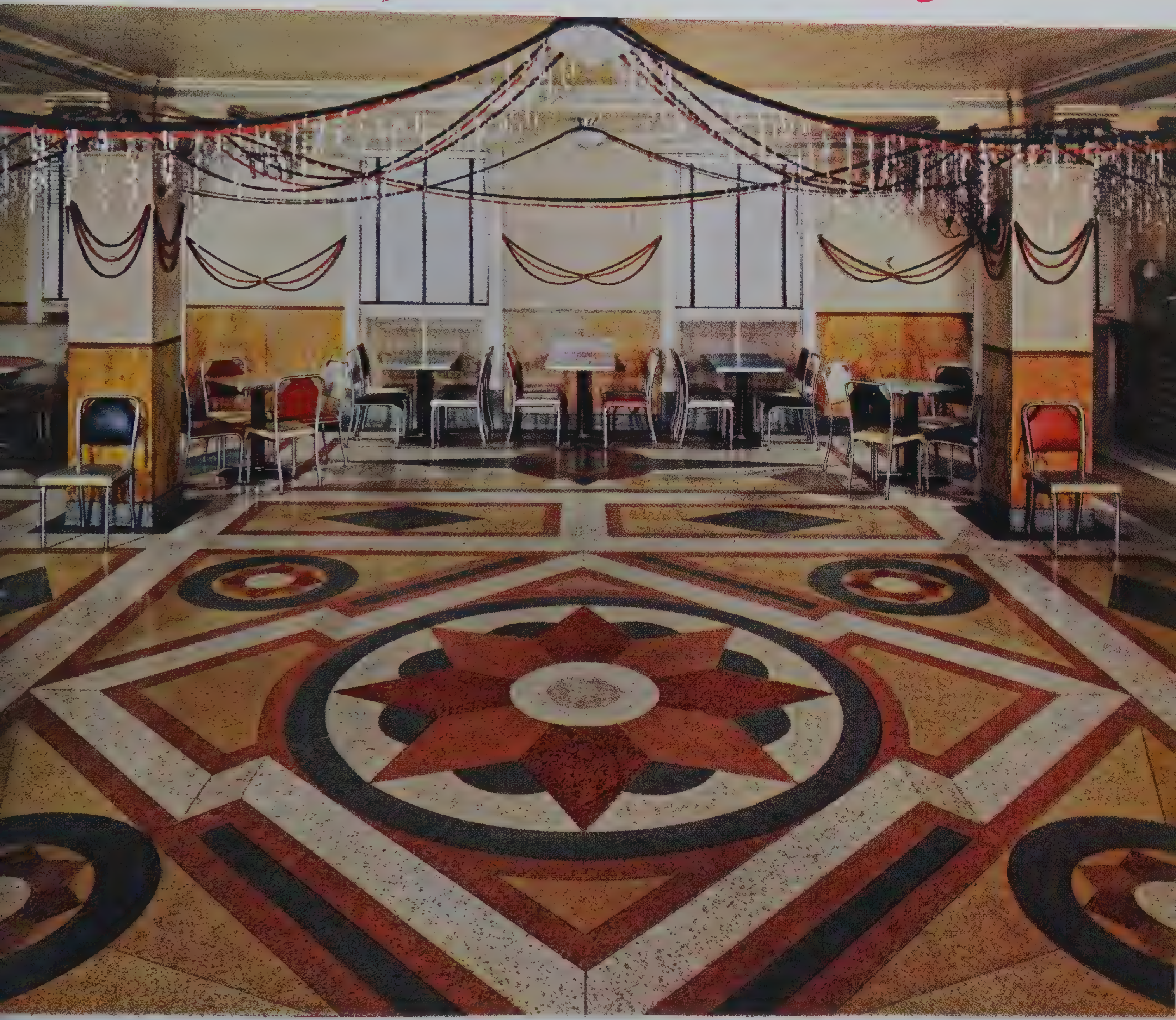

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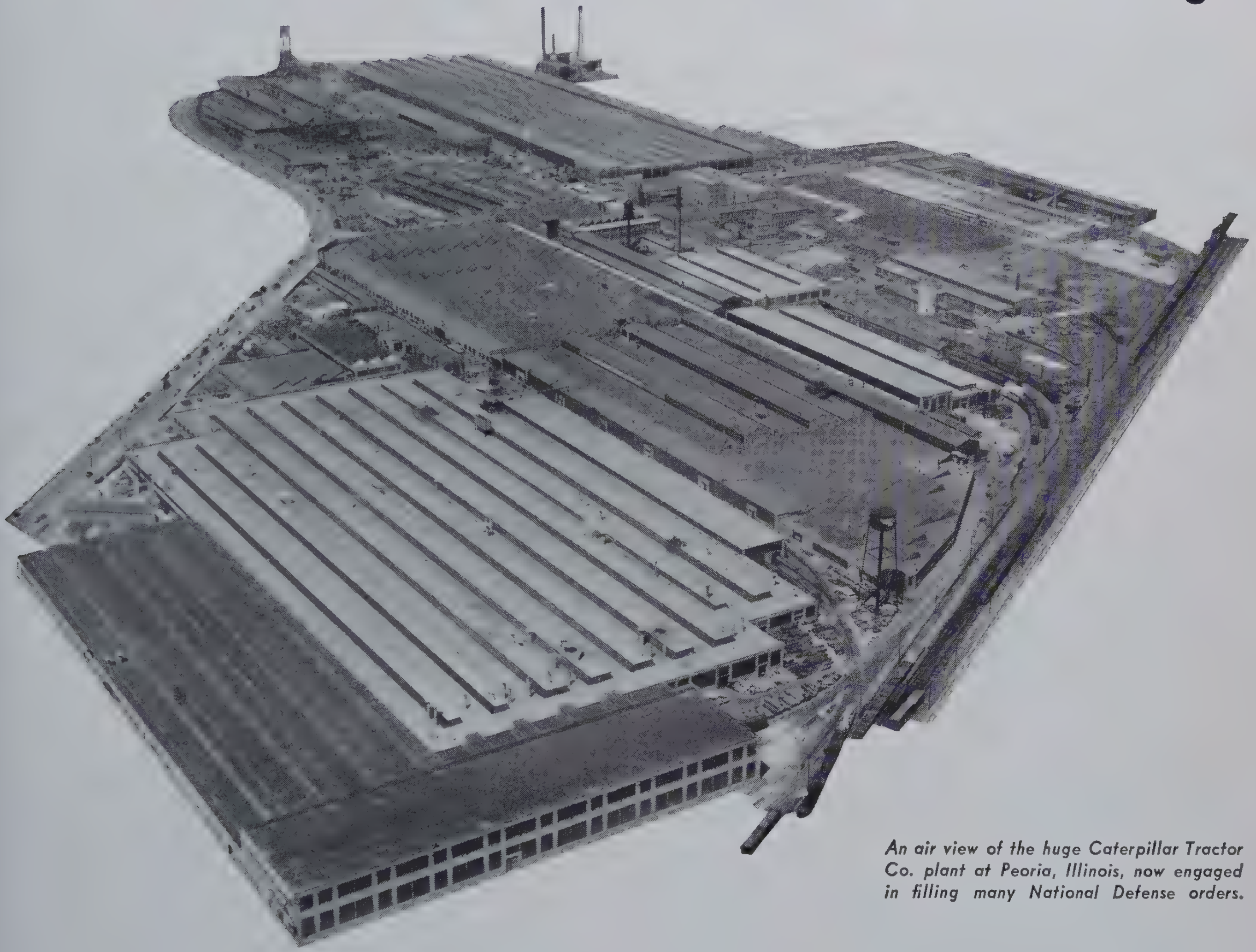

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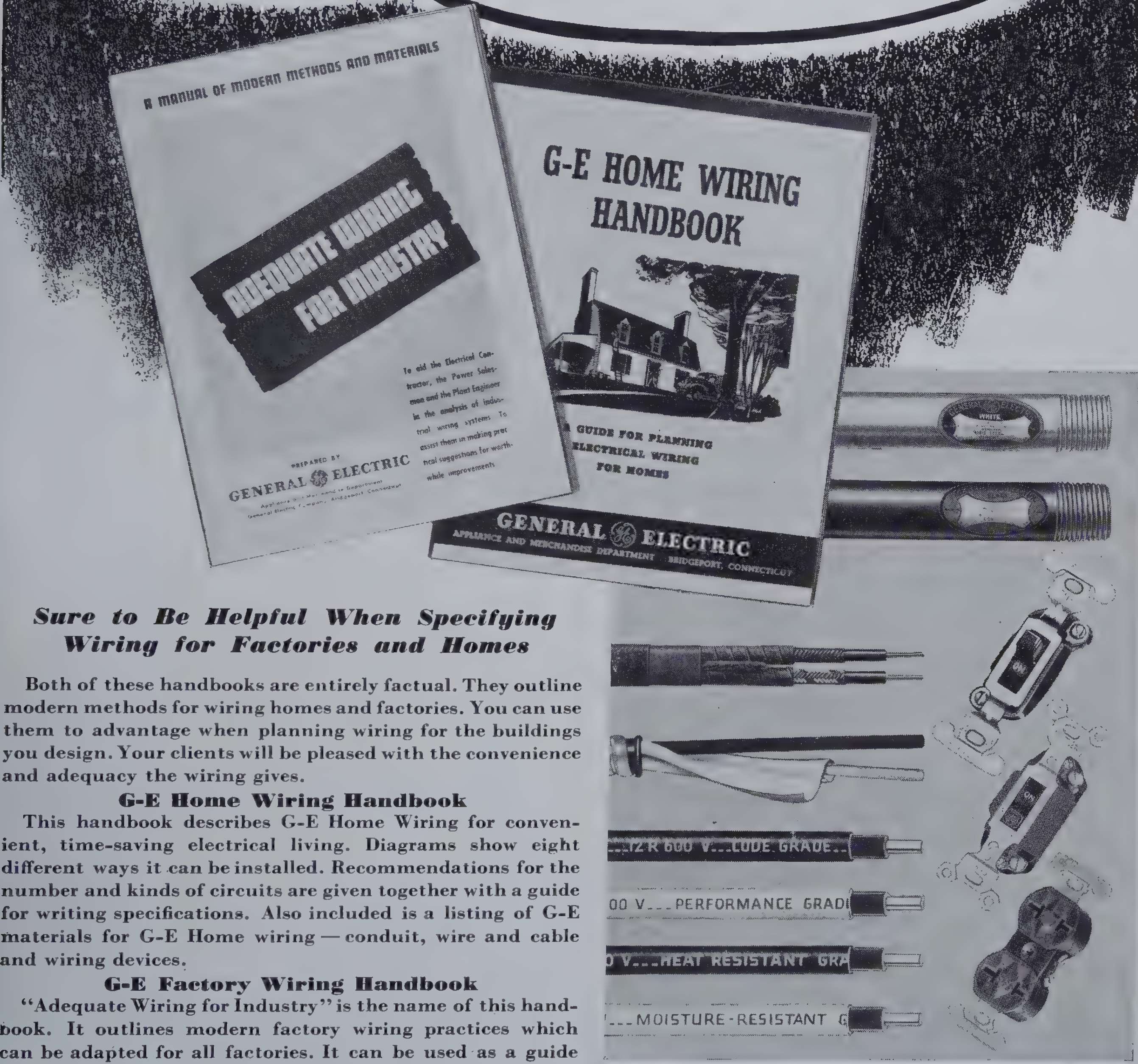
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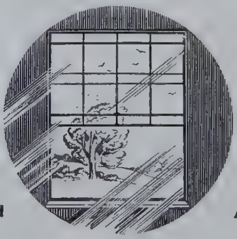

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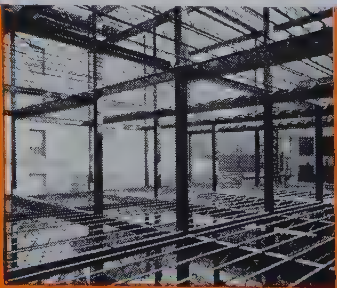

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THE MONOGRAPH SERIES
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REACTION UNDER PRESSURE

EDITORIAL COMMENT BY KENNETH REID

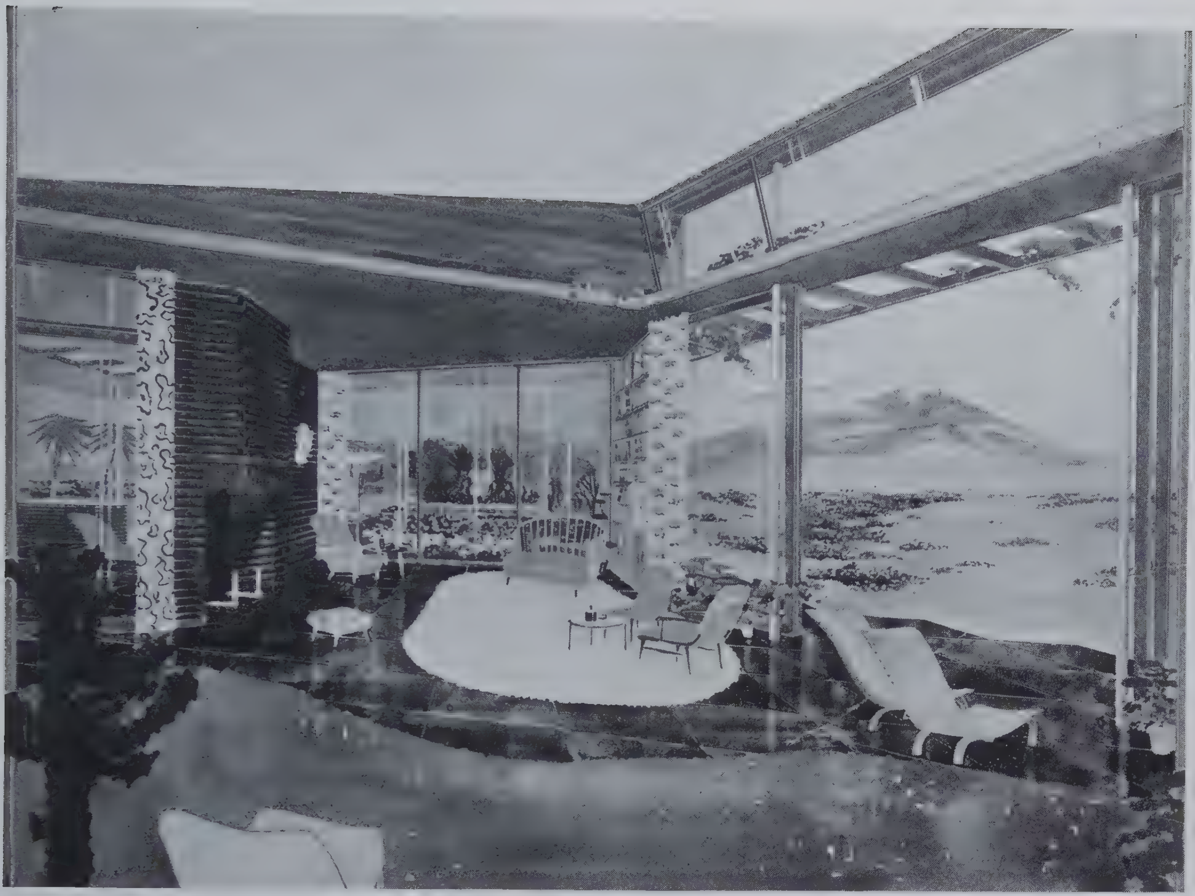
Is your ear to the ground? That rumbling, crunching sound you hear is democratic America making up its collective mind that it is time to declare war openly against the forces of inhumanity. The impact of the attempted world counter-revolution against freedom has speeded up recently until the reality of its threat to our own lives and liberties is at last evident to even the most unreceptive mind. The meaning of the phrase "total war" is now being driven home to the average citizen by taxes, rising prices, conscription, priorities, and other violent dislocations of his life. He is beginning to see that every man, woman, and child in the world (with the exception of those privileged to belong to the "Herren" class) is just as much the object of Nazi attack as the military—and that the attack takes many forms other than shooting. From this perception to the decision to fight back is not a long step. It will be taken soon.

Adjust your ear a little more carefully. Be a bit selective of your wave-length and you will hear a humming note amid the general cacophony. This is the sound of a stirring about in the architectural profession as it wakens to the reality of the social and economic pressures that are transforming it. These pressures have been exerted with gradually increasing force over a substantial period, but a certain amount of elasticity in the mass has for a while limited the shock to the more exposed layers. Now the inexorable weight is being felt throughout the professional body, forcing its individual members together more tightly.

In the field of direct architectural activity there has been a trend for some time toward the large organization—the government bureau, the big corporation's "architectural department," and more lately the expanded office of the architectural and engineering firm which has been successful in landing the big defense contract. One by one, small offices of perhaps hundreds of individual practitioners have been closed as their owners have merged themselves into the larger and larger groups serving the mass client, represented by either government or big business. Of course, this is just a trend, not by any means a universal rule. There are many individual architects who will continue able to hold out against it, even though application of priorities is making it harder and harder to do so.

But the centripetal pressure of today's circumstances comes into play again, in another way. In the midst of his troubles the still independently practicing architect is turning to his fellows for help. He is realizing at last that "In Union there is Strength" is not just idle talk. Word comes to us from here and there through the country of a renaissance of interest among architects in the activities of their professional organizations. New York, Michigan, Ohio, and perhaps other States are making important plans. Drives for increased membership are being launched. Efforts are being seriously made to unite hitherto separate groups that have existed side by side in the same areas. The object is to gain strength of numbers and thus increase power of action. These movements are being focussed around Public Relations activities. They are bringing an awareness of the essential mutuality of interest of all architectural men and of the necessity for standing strongly together to cope with today's problems.

We are optimistic enough to believe that out of all this will come permanent benefit in the form of a stronger, better-organized profession, ready and able to insist upon its right to serve a society that will be needing it more than ever in the years ahead.



WATER COLOR STUDY OF FIREPLACE ALCOVE IN THE LIVING ROOM OF DESERT HOUSE NEAR PALM SPRINGS

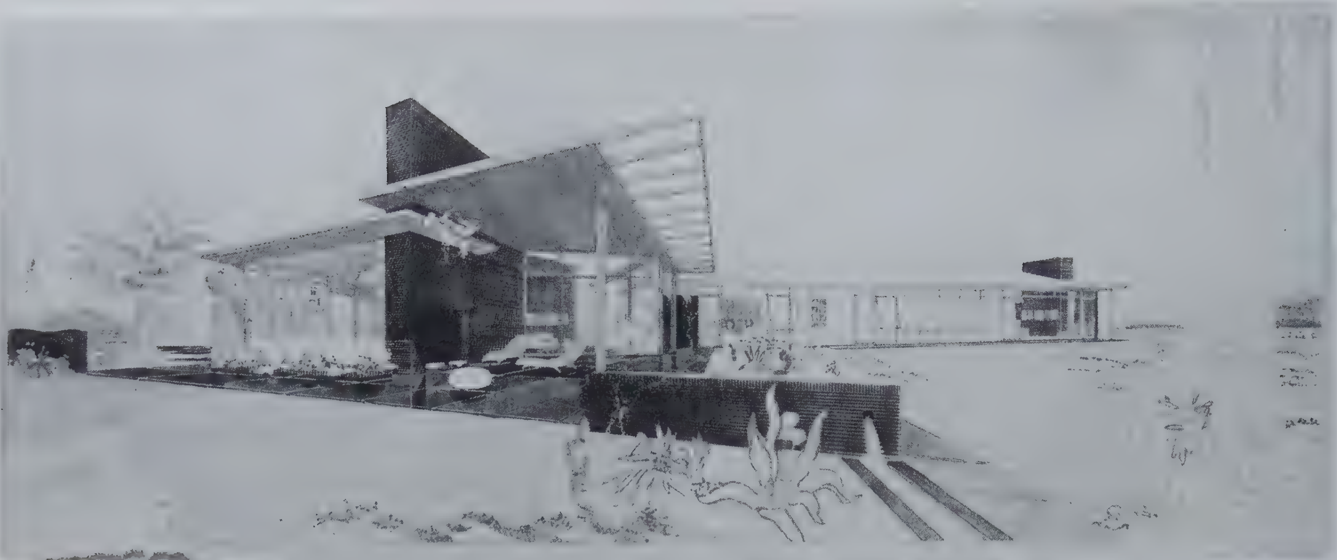
THE ARCHITECT AND HOUSE

6 — DON HATCH, OF NEW YORK

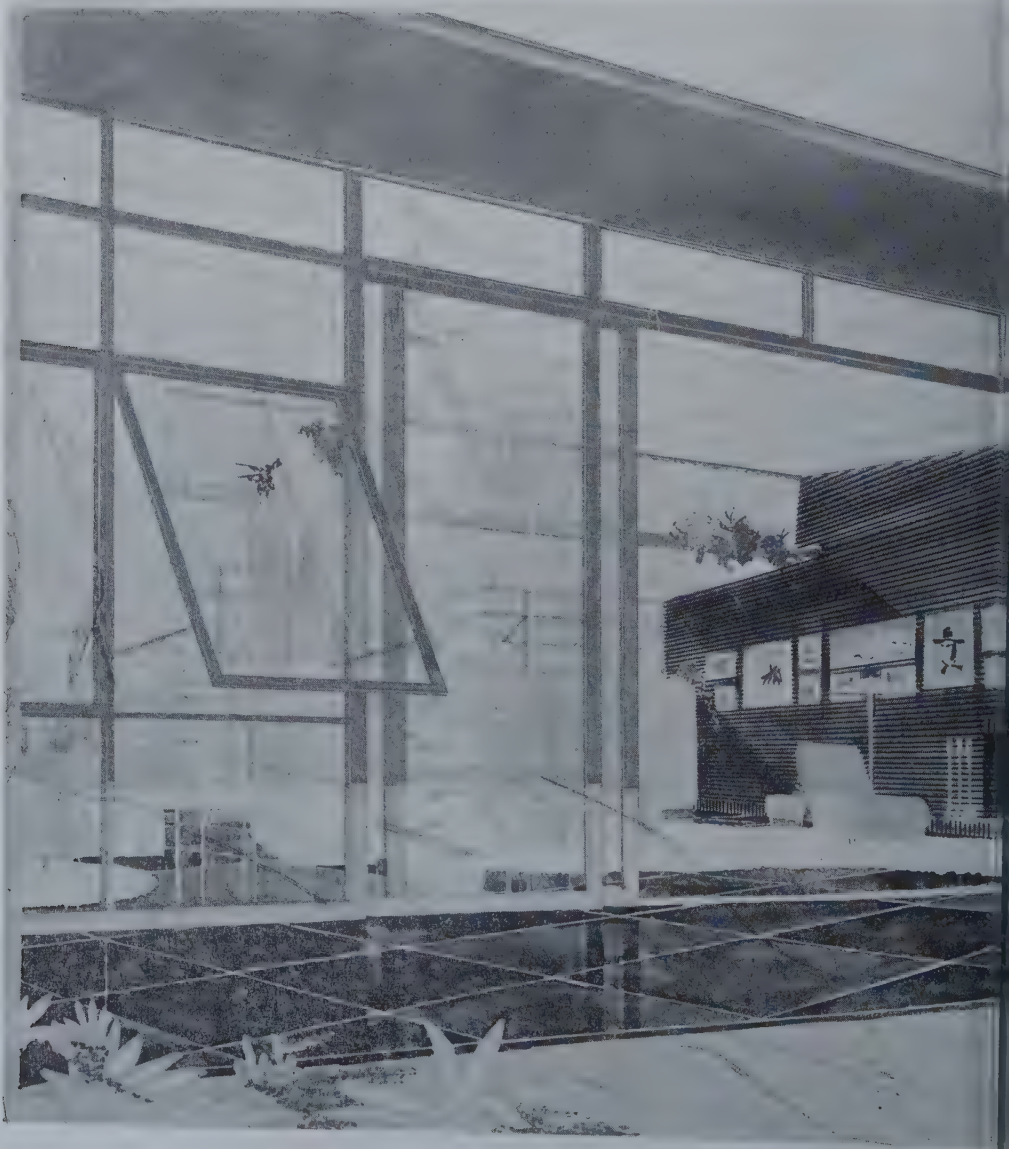
The logical interpretation of exterior-interior design—goal of Don Hatch, New York Architect, whose residential practice is represented by five houses in this issue—implies a contract that gives the Architect full authority. Hatch calls it Complete Service, whether personally given or through collaboration with other designers, decorators, and landscape men, and he maintains that this practice is to the best interest of the Client as well as the Architect.

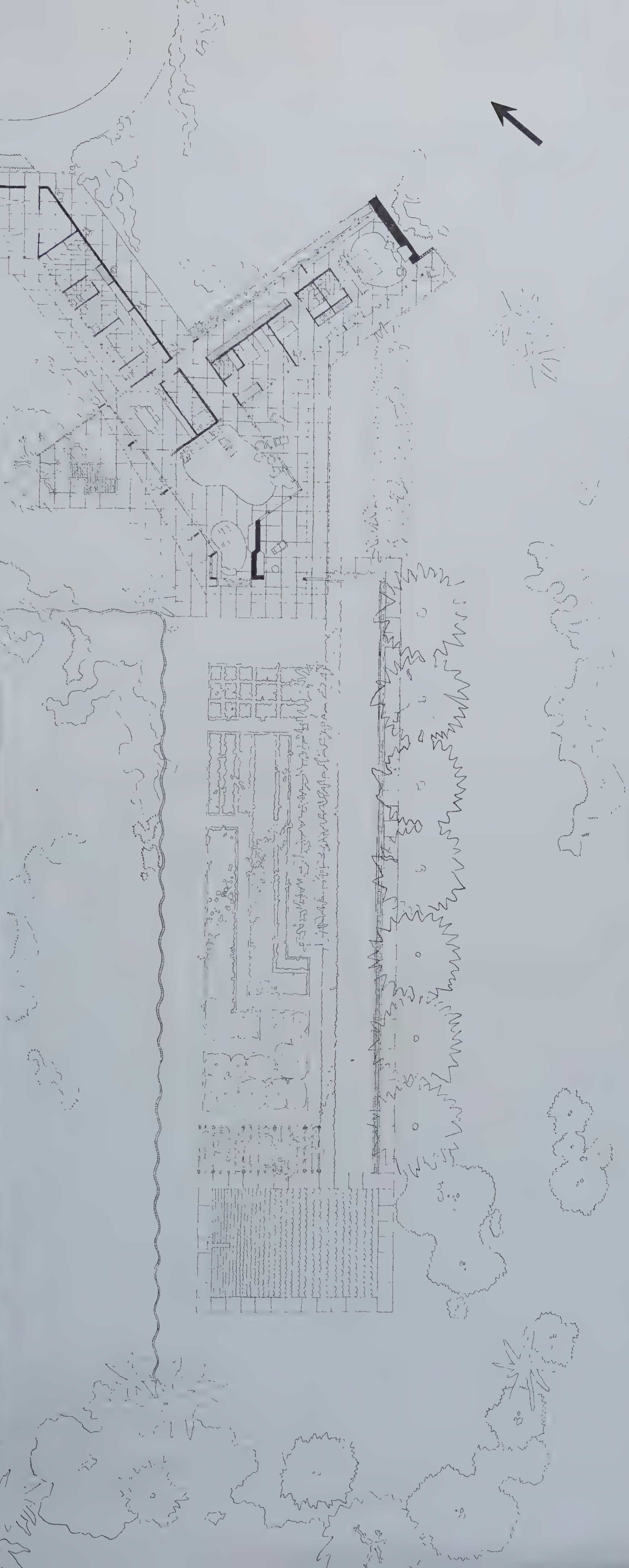
Given a commission for Complete Service, the Architect can marshall the factors that will govern or affect the design, plan for the proper relation of all elements of the new building, avoid compromises that would injure any single part, and continuously coordinate the design and execution. Hatch's procedure has been to familiarize himself with the requirements of the client, the character of the site, and the expenditure allowable, prior to the first study sketches and models. With these studies he is painstaking. When his client clearly understands and approves the building and furnishings proposed, precise working drawings are started and exacting specifications are written. Hatch then supervises all stages of construction, landscaping, and decorating.

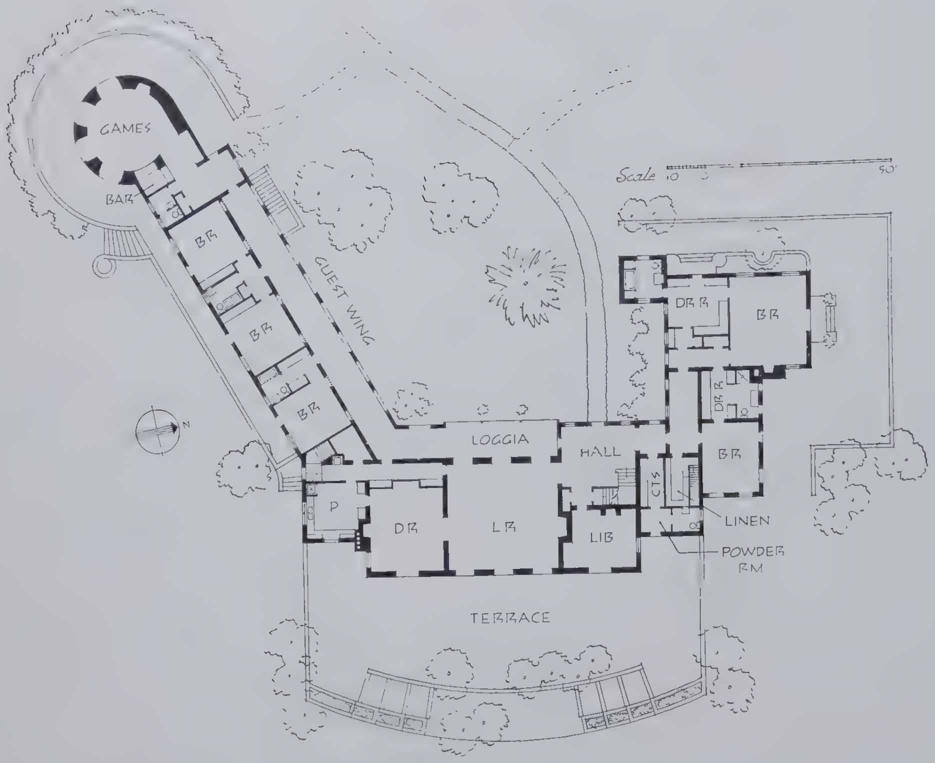
Before starting to design the Desert House near Palm Springs, he inquired about the living and entertaining habits of the client; the number of members of the family, servants, and guests to be provided for; hobbies and preferences of these people; annoyances the client had experienced in other houses in the past; and what the client wanted in this winter home. Hatch then studied many photographs of the unusual site, determined the vistas, and made his first sketches and models. The hues of the desert wild flowers suggested a color



THE CLIENT FOR WHOM DON HATCH DESIGNED THIS WINTER HOME HAS ACQUIRED 160 ACRES OF DESERT NEAR PALM SPRINGS, SURROUNDED BY THE PICTURESQUE SANTA ROSE MOUNTAINS. THE DESERT IS A MASS OF FLOWERS FROM NOVEMBER TO MAY AND THE DESIGN TAKES ADVANTAGE OF UNUSUAL VISTAS. A DRIFT FENCE PROTECTS THE FORMAL PLANTING OF DESERT SHRUBS BETWEEN THE LIVING TERRACE AND THE SWIMMING POOL (SEE PLOT PLAN)

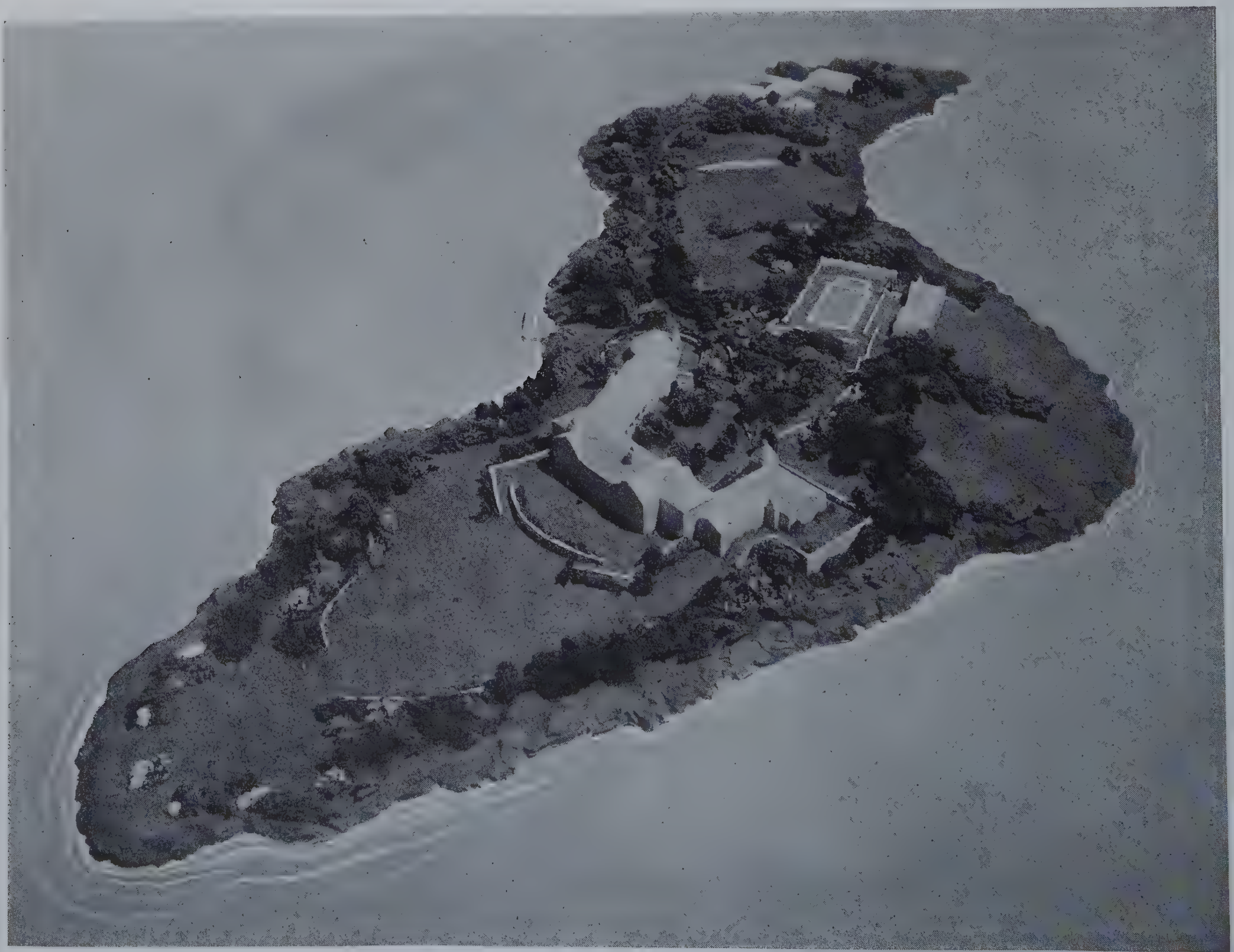


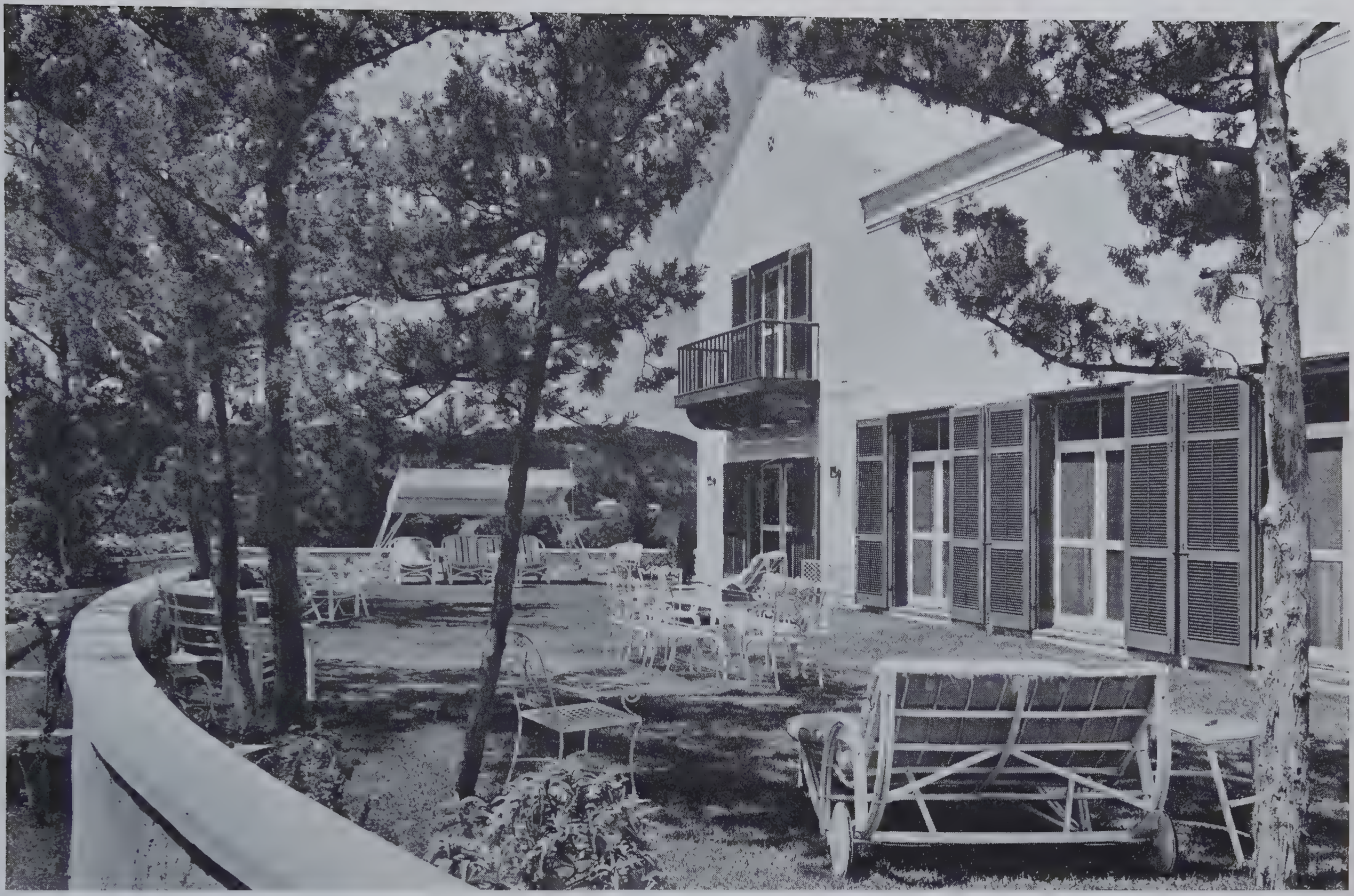




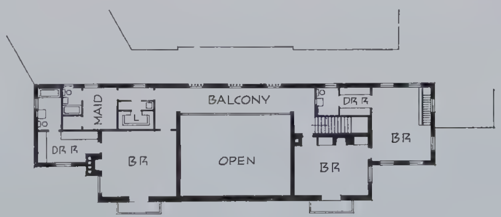
FOR A SOCIALLY-PROMINENT CLIENT WHO OWNED A SEVEN-AND-A-HALF ACRE ISLAND IN BERMUDA, ARCHITECTS CARL LANDEFELD AND DON HATCH DESIGNED A COMPLETE ESTABLISHMENT—SPACIOUS RESIDENCE WITH SERVICE BUILDINGS, A SWIMMING POOL AND CABANA, AND THE NECESSARY DOCKS, BOAT HOUSES, ETC., INDICATED ON THE TEN-FOOT STUDY MODEL BELOW. THIS IS AN ECHO OF BERMUDA'S PLAYGROUND ERA—BEFORE THE ISLAND GENTRY WERE DRIVEN TO SECLUSION BY THE AMERICAN FORCES NOW ESTABLISHING OUR DEFENSE BASE

THE ARCHITECTS' FIRST CONSIDERATION WAS TO ORIENT THE HOUSE FOR SUN AND PREVAILING WINDS

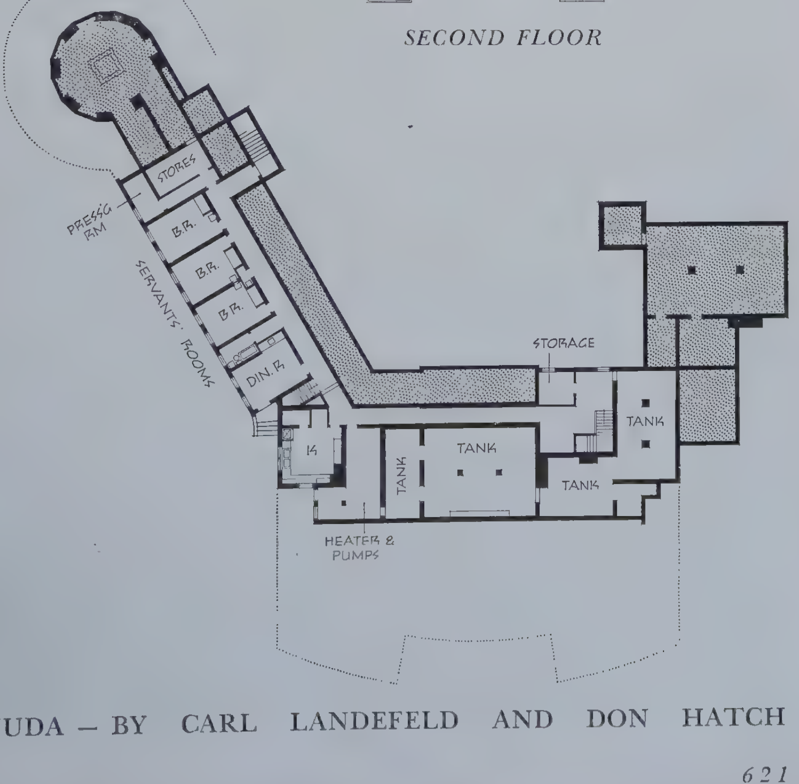




THE WIDE, SUNNY LIVING TERRACE. (SAMUEL GOTTSCHO PHOTOS, COURTESY "TOWN AND COUNTRY"

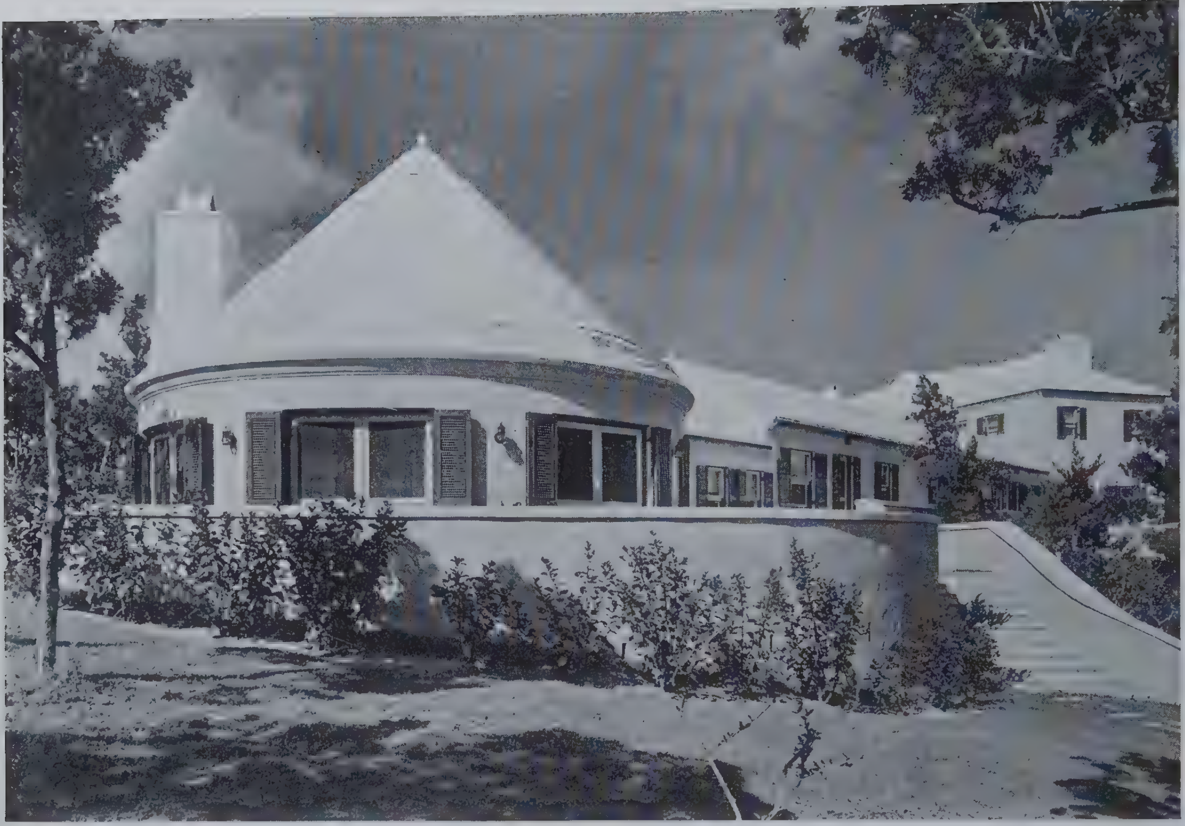


SECOND FLOOR

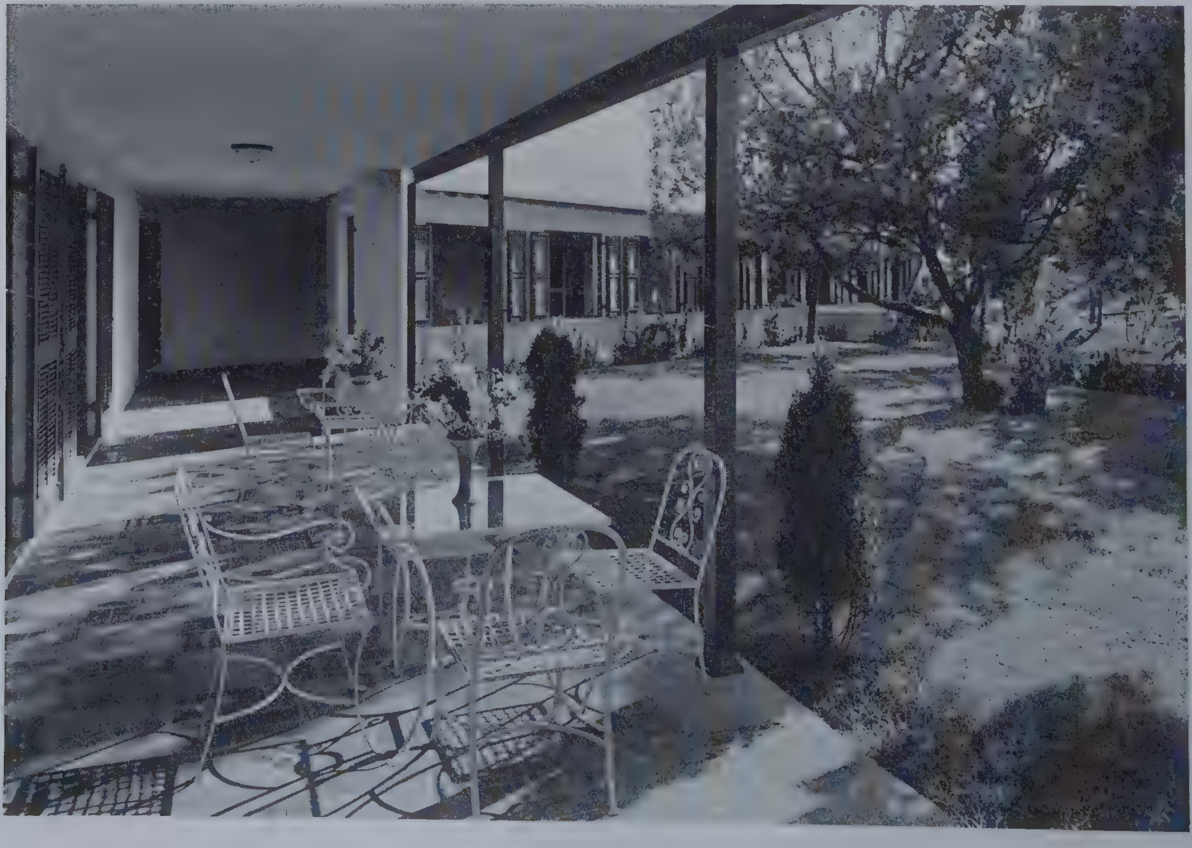


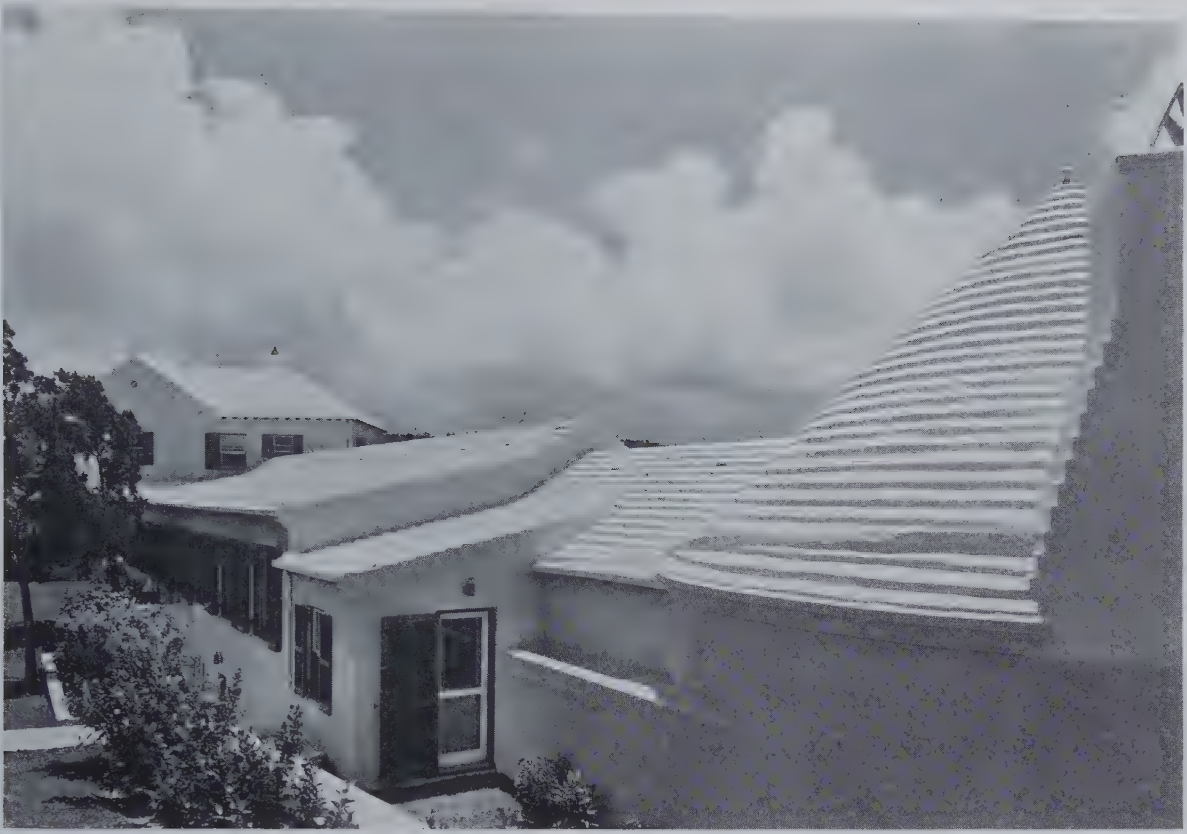
TWO MORE FAMILY BEDROOMS AND A MAID'S ROOM ARE ON THE SECOND FLOOR, OTHER SERVANT ROOMS BEING LOCATED IN THE BASEMENT BENEATH THE TERRACE OF THE GUEST WING. NOTE THE TANKS FOR STORAGE OF THE RAINWATER FOR HOUSEHOLD USES, FED BY LEADERS FROM THE LIMESTONE ROOF GUTTERS. IT IS A BERMUDA CUSTOM TO PUT ONE GOLDFISH IN EACH OF THESE TANKS! SALT WATER IS PUMPED UP FOR THE SWIMMING POOL AND FOR WATER CLOSETS

A RESIDENCE IN BERMUDA – BY CARL LANDEFELD AND DON HATCH

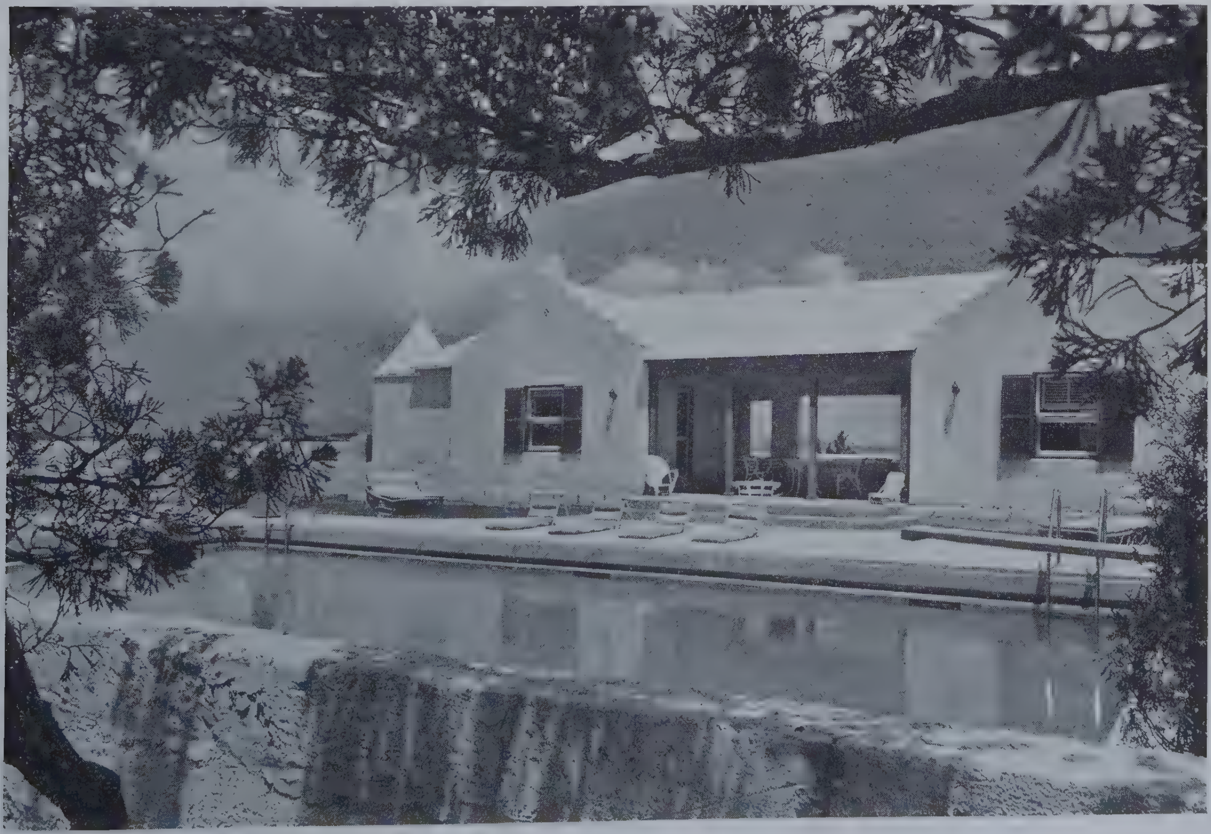


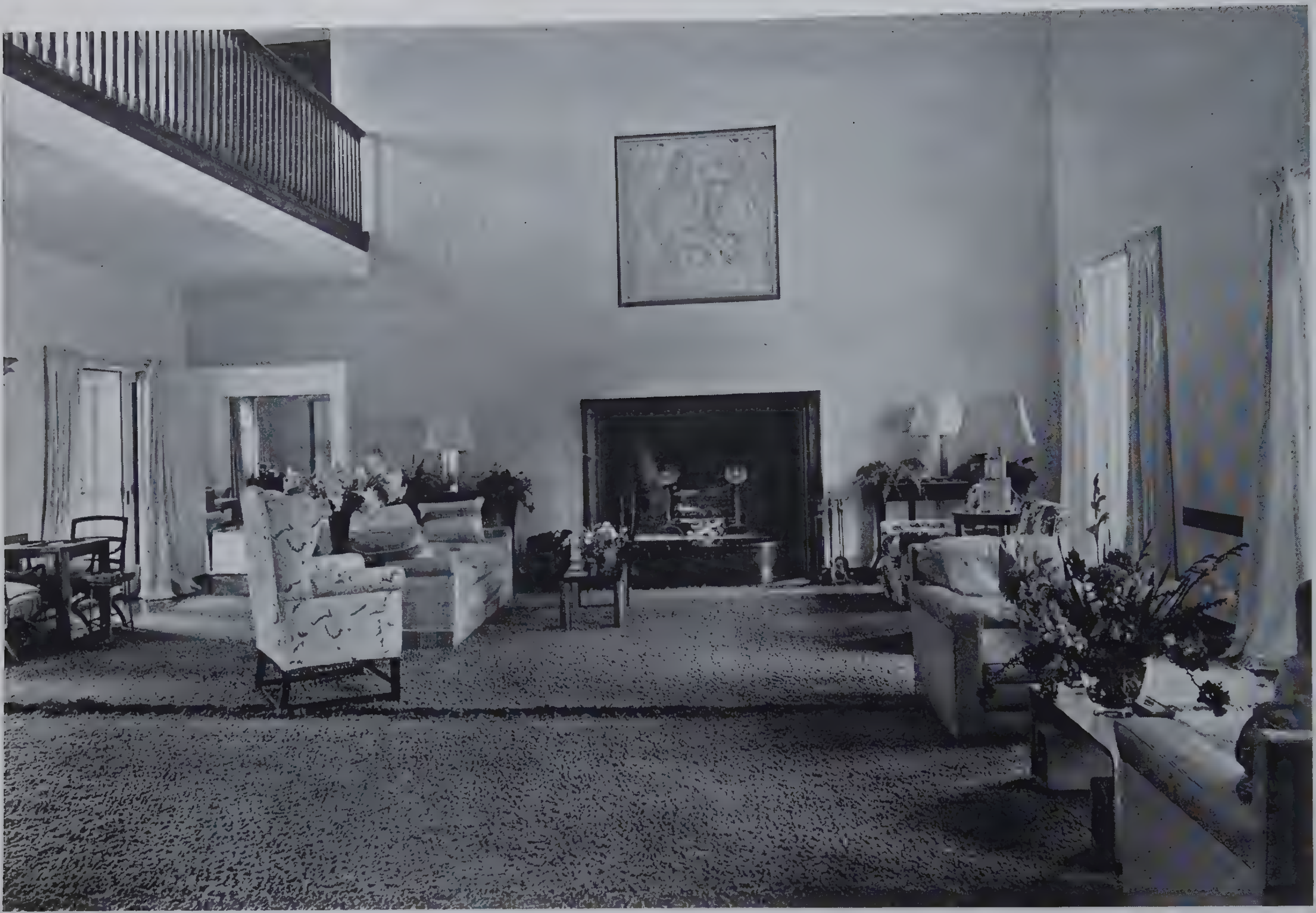
THIS VIEW OF THE CIRCULAR GAME ROOM, THE GUEST WING, AND LARGER MASS OF THE RESIDENCE BEYOND, IS FROM THE SOUTHWEST WHERE A FLAGSTONE WALK LEADS TO THE BOAT LANDING. THE ENTRANCE GALLERY AND COMFORTABLE LOGGIA ON THE WEST SIDE ARE SHOWN BELOW. THE SHUTTERS ON THIS HOUSE ARE A NECESSITY, FOR PROTECTION DURING THE STORM SEASON. THEY ALSO PROVIDE AN EFFECTIVE COLOR NOTE FOR CONTRAST WITH THE DAZZLING CORAL LIMESTONE OF THE WALLS AND ROOF. THIS NATIVE MATERIAL, QUARRIED ON THE SITE, IS CUT ABOUT THE SIZE OF CEMENT BLOCKS, LAID WITH MORTAR AND RENDERED WITH LIME. INTERIOR FINISH, PLASTER BOARD AND PLASTER OVER WOOD FURRING STRIPS



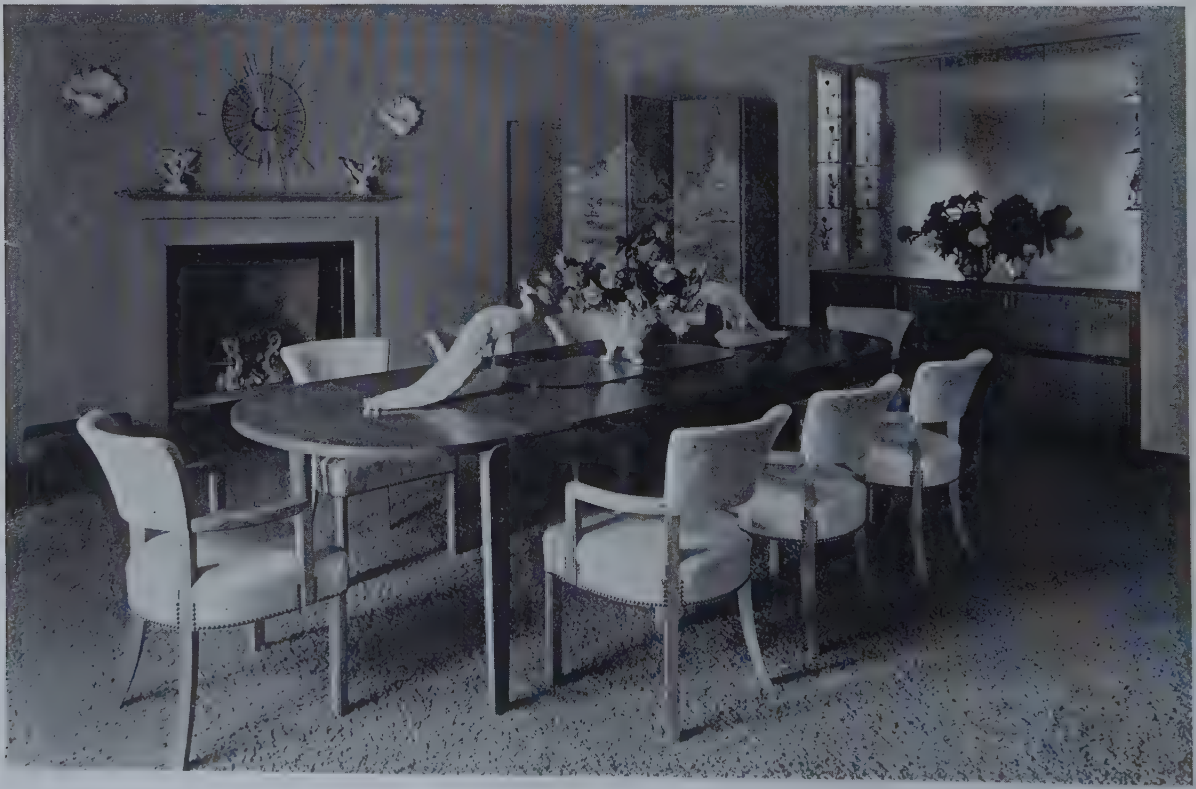


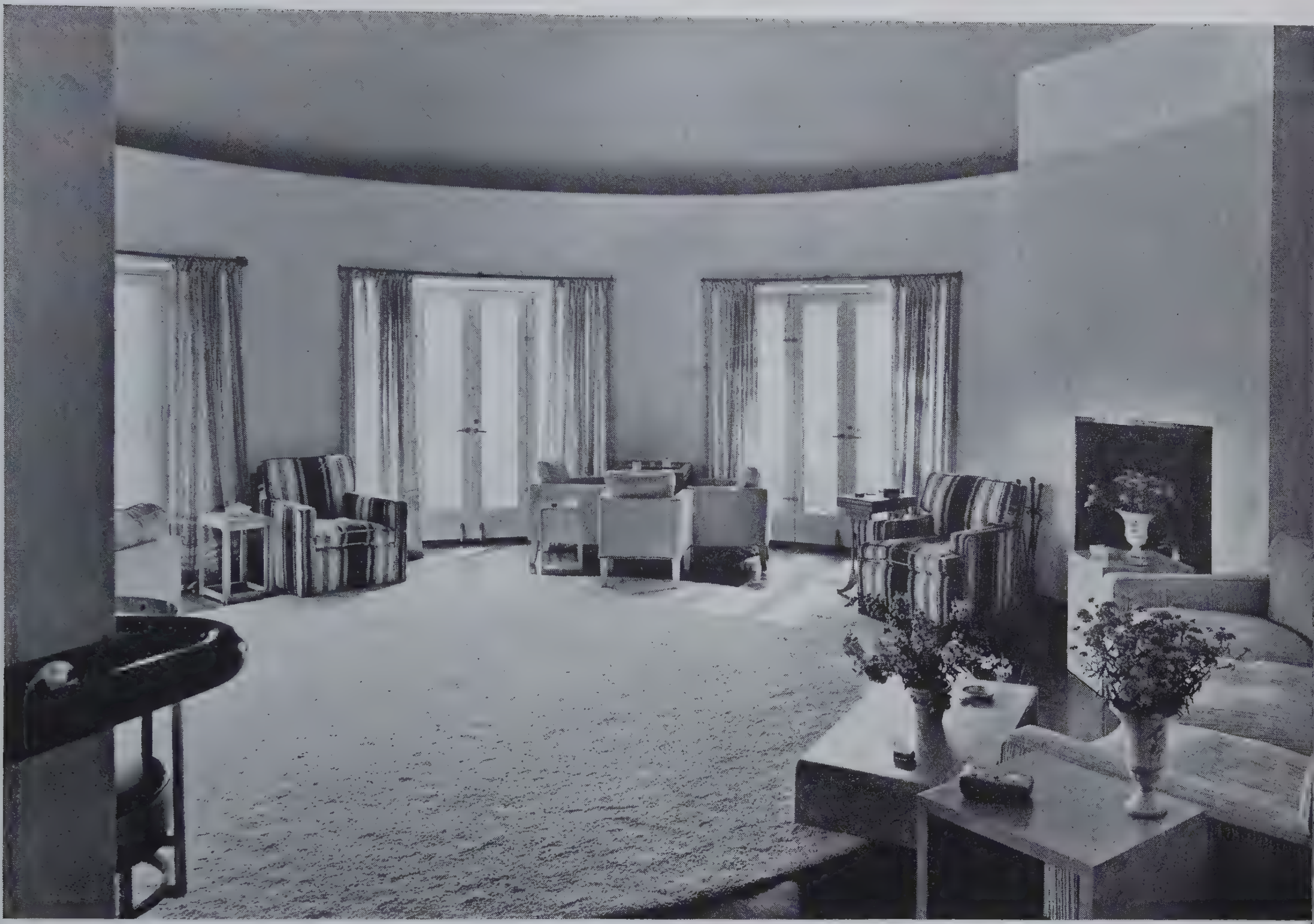
THE MORE ROOF AREA, THE MORE WATER FOR THE BERMUDA HOUSEHOLD. THE ONE-INCH ROOF "SHINGLES" OF CORAL LIMESTONE ARE WATERPROOFED WITH A COAT OF LIME MORTAR WHICH HELPS KEEP THE RAINWATER FRESH. EVERY DROP IS CAREFULLY SAVED, SO ALL THE LIMESTONE GUTTERS LEAD TO RESERVOIRS IN THE BASEMENT (SEE PLAN, PAGE 621). THE LOGGIA OF THE CABANA (BELOW) HAS A PICTURE WINDOW AFFORDING A SUPERB VIEW OF HAMILTON HARBOR. IT ALSO HAS DRESSING ROOMS AND A BAR, AS THE ESTATE WAS DESIGNED FOR ENTERTAINING. THE POOL IS LIGHTED UNDER WATER, THROWING INTERESTING REFLECTIONS ON THE TERRACE WALLS AND THE CABANA, AND FACILITATING NIGHT SWIMMING



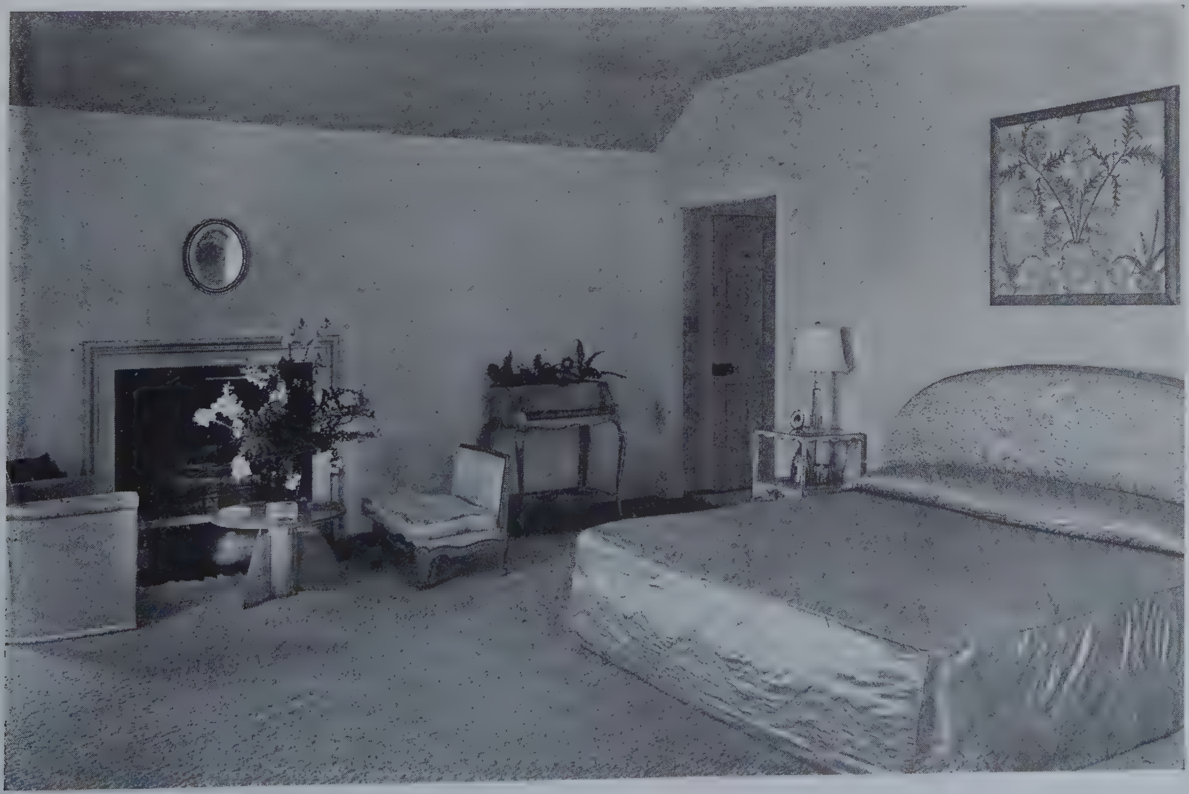


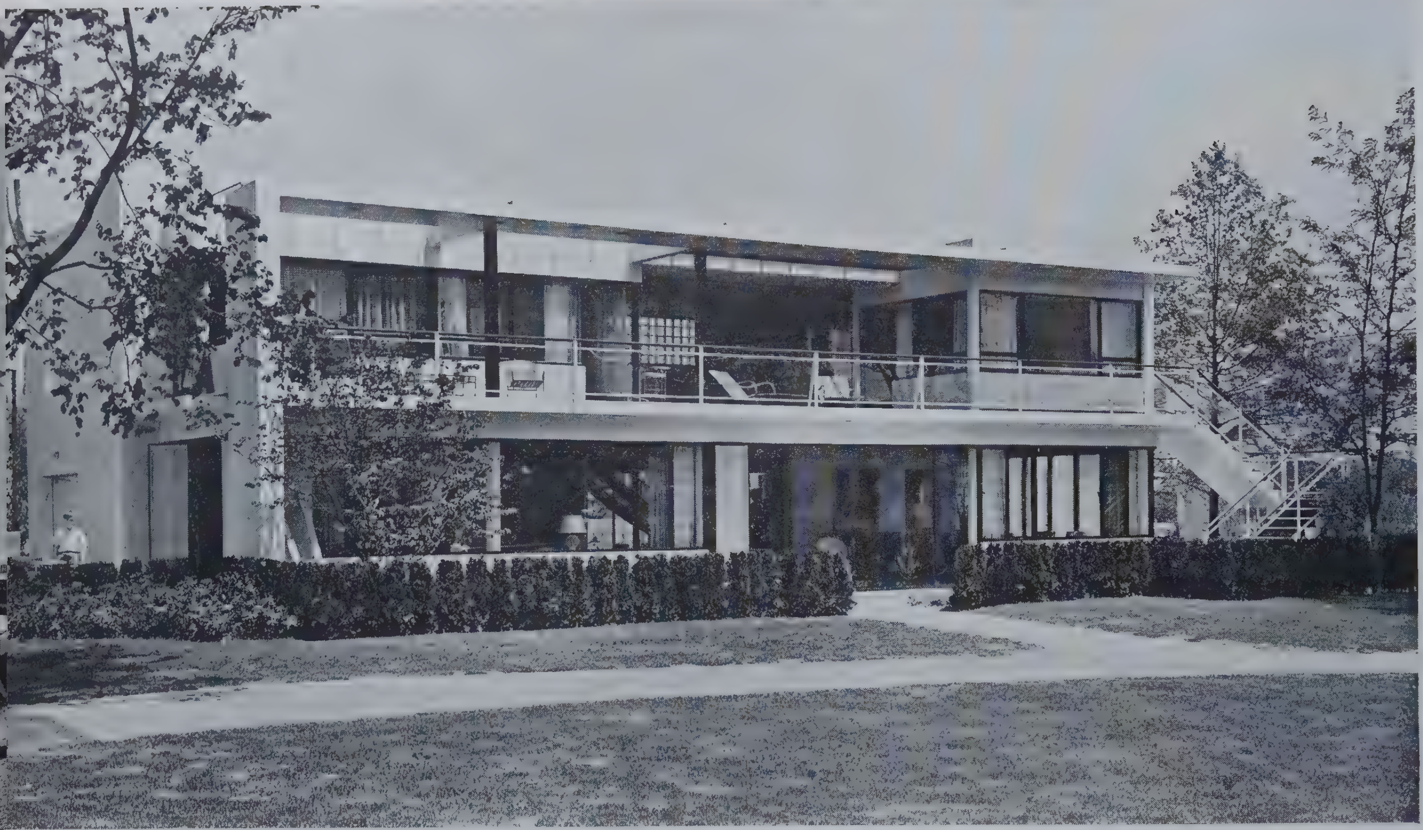
FROM THE ARCHITECTS' DRAWINGS, THE INTERIOR DECORATION WAS COMPLETELY DESIGNED BY MARY HOWARD, NEW YORK DECORATOR, BEFORE SHE VISITED THE HOUSE. EVERY PIECE OF THE FURNITURE WAS CAREFULLY SELECTED TO SUGGEST THE INFORMAL TEMPO OF SEMI-TROPICAL LIVING AND THE SUCCESS OF HER ARRANGEMENT IS EVIDENCED BY THE PHOTOGRAPHS HERE. PASTEL TINTS EMPHASIZE THE SIMPLICITY



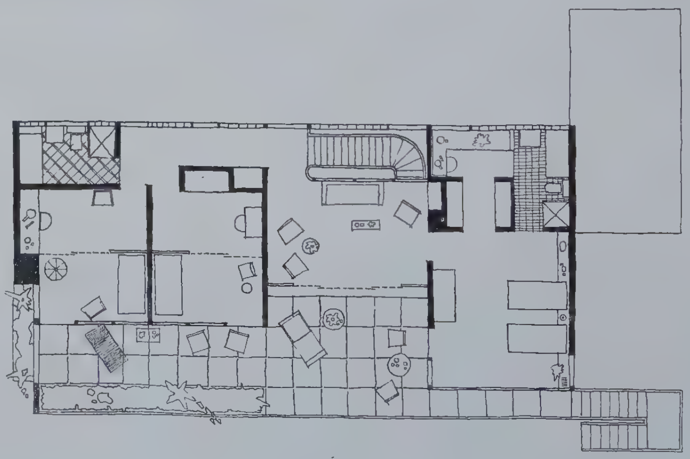


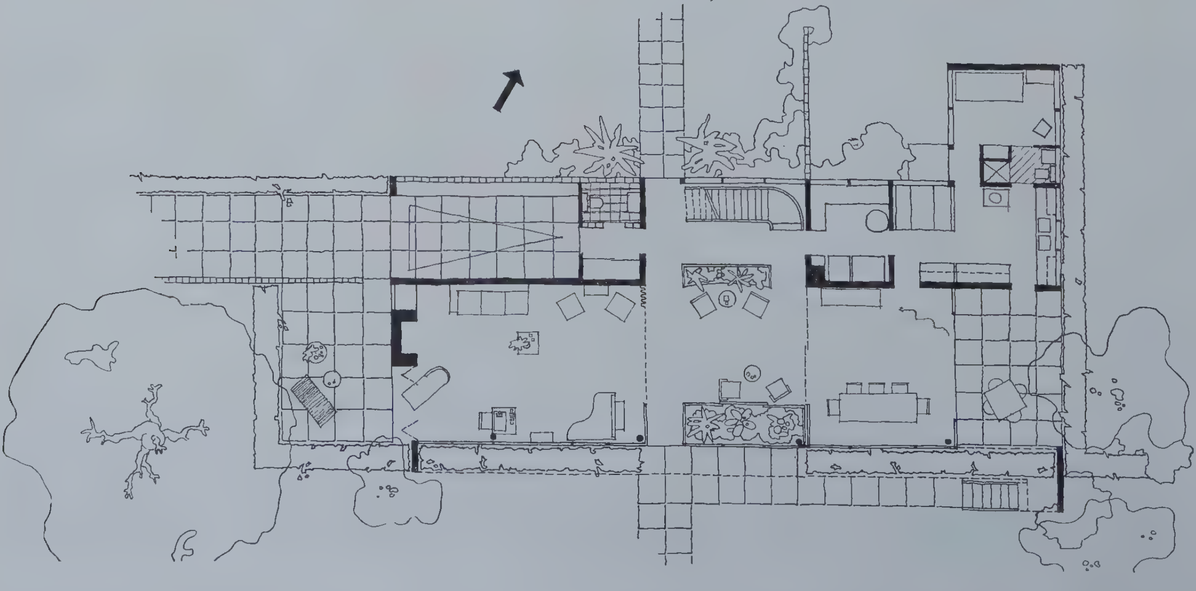
THE CIRCULAR GAME ROOM IS LIGHTED FROM A COVE AT THE CEILING LINE. LAMPS ARE GENERALLY USED ELSEWHERE, AS IN THE SPACIOUS LIVING ROOM ACROSS-PAGE AND THE MASTER'S BEDROOM BELOW. IN THE WHITE AND GREEN DINING ROOM (BELOW, ACROSS-PAGE) THERE IS AN EFFECTIVE ALCOVE OF FROSTED MIRRORS FLANKED BY LIGHTED NICHES CONTAINING FIGURINES. THE FURNITURE IS WARM GRAY

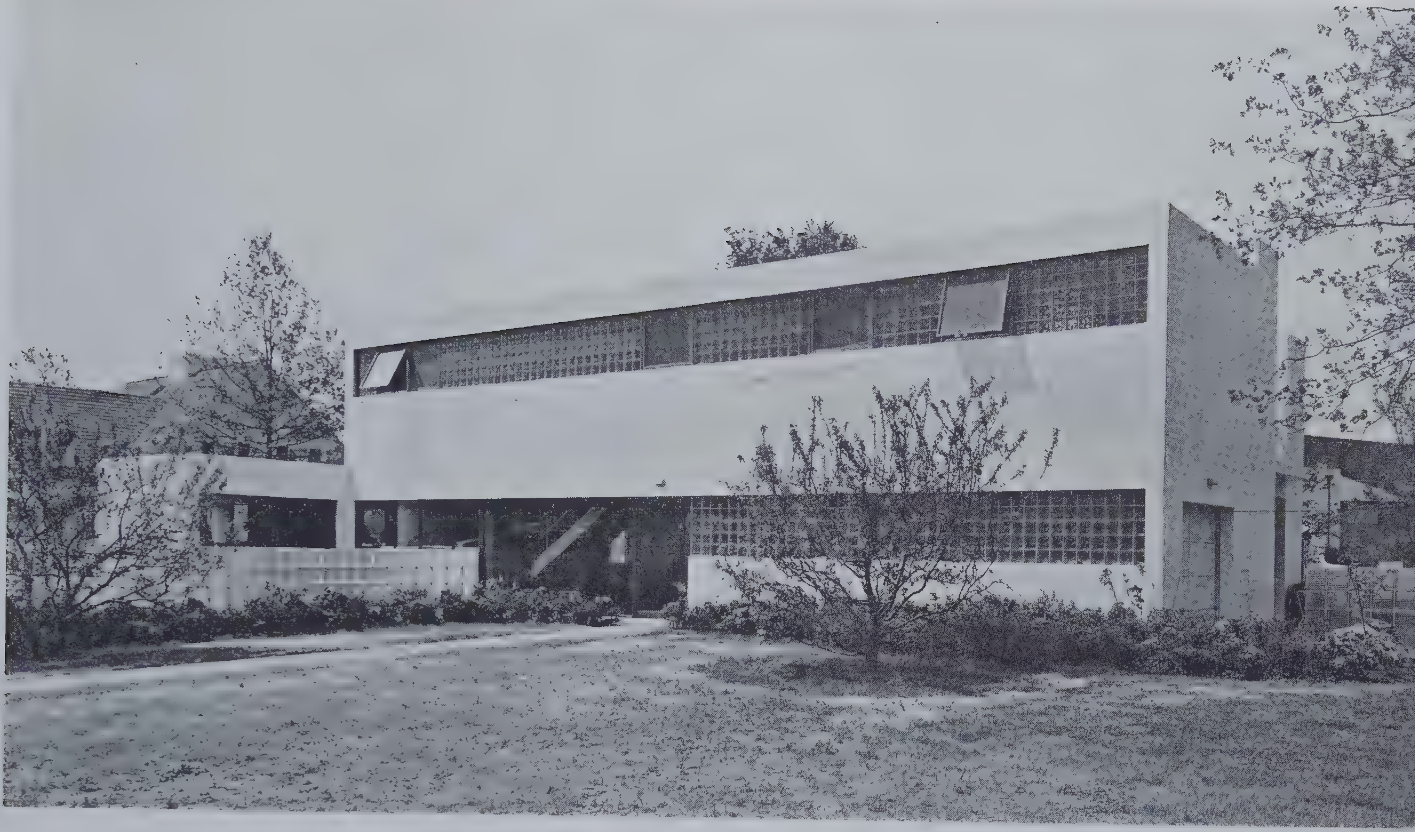


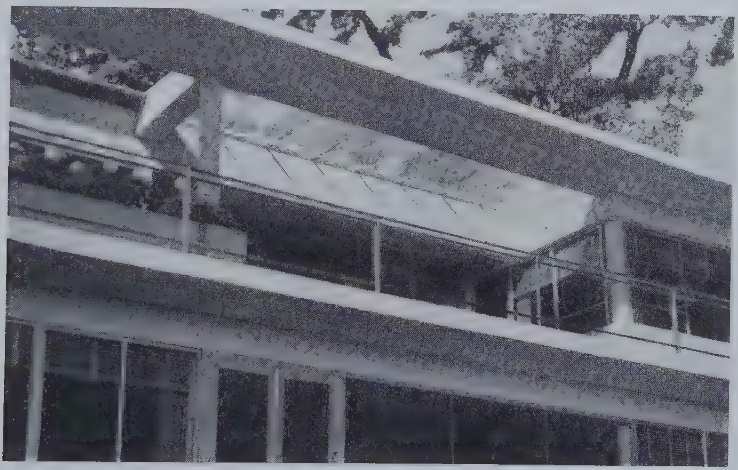


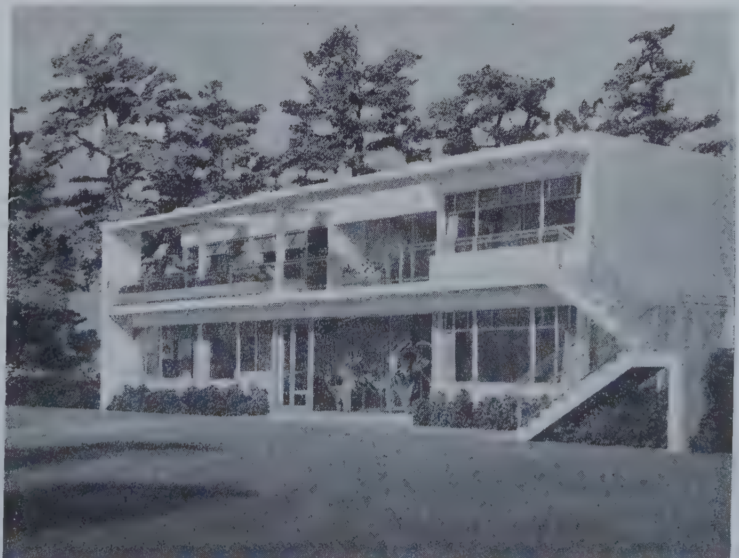
TO DEMONSTRATE NEW USES OF GLASS IN HOMES, HATCH DESIGNED THE NOW FAMED PITTSBURGH PLATE GLASS COMPANY HOUSE FOR THE NEW YORK WORLD'S FAIR, IN THE "TOWN OF TOMORROW." IT WAS BUILT OF CONCRETE POURED IN PLYWOOD FORMS, WITH INTERIOR PARTITIONS OF NATURAL COLOR PLYWOOD. GLASS BLOCK ON THE STREET SIDE AND PLATE GLASS ON THE GARDEN SIDE ADMITTED MAXIMUM LIGHT



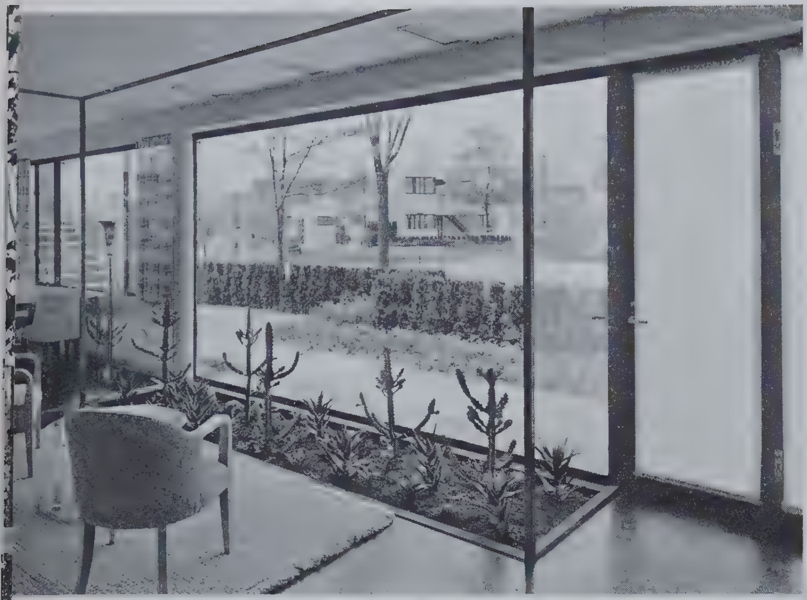








THIS HOUSE ALSO WAS CAREFULLY STUDIED IN SKETCHES AND SMALL-SCALE MODELS BEFORE CONSTRUCTION. THEN WHEN THERE WAS A DEMAND FOR ADVANCE PHOTOGRAPHS, THEODORE CONRAD, JERSEY CITY MODELMAKER, WAS COMMISSIONED TO BUILD A COMPLETE MODEL AT ONE-HALF INCH SCALE. HIS REMARKABLE SKILL IS ATTESTED BY THE TWO SMALL PHOTOS OF THIS MODEL SHOWN AT THE RIGHT



VIEWS OF THE INTERIOR OF THE GLASS HOUSE AT THE FAIR (TOP AND BELOW) EMPHASIZES THE OPENESS OF THE PLAN, DRAMATIZED BY GENEROUS USE OF GLASS. ONE OF THE PHOTOS MADE OF THEODORE CONRAD'S MODEL OF THE HOUSE (ABOVE) GIVES MUCH THE SAME FEELING AS THE CORRESPONDING VIEW OF THE CONSERVATORY AT THE TOP

scheme (redwood, dark blue, black brick, and white asbestos roof) and the sudden violent temperature changes dictated a house that might be readily opened or closed, heated or cooled, lighted or darkened.

A trip to the site, 160 acres in a valley of the Santa Rosa mountains, confirmed the architect's earlier impressions. He checked on building materials available there, studied the elusive beauty of the desert, and its difficult vagaries as well. Returning to his office, he completed the sketches and models and made final selections of interior finishes. This definite picture of the house won the client's approval. Working drawings and specifications were then prepared, and on another trip to Palm Springs the plans were let out for bidding.

"The client was definite in his desires but not biased," Hatch recalls. They agreed on a house of glass screens in a redwood frame, resting on a broad platform of dark blue wood blocks patterned in four-foot squares with white maple strips. Corrugated glass was used where privacy was desired, plate glass for unbroken view. One concrete slab supports the house and terraces, and the white asbestos roof extends with broad eaves to shade the glass screens. The dark blue floor of dyed redwood also absorbs glare. The clerestory provides special ventilation and its overhang conceals fluorescent lighting. The forced-air heating system also has provision for a cooling coil. Hatch often favors forced-air systems because of their possible utility for cooling in summer.

In association with Carl Landefeld, Hatch designed the Bermuda residence shown on pages 620-625 for socially-prominent New York clients who owned Perot's Island, in the Riddles Bay section across the bay from Hamilton. Their first concern was to choose the best site and exposure, then to design with proper precautions against the storm season, the rather constant humidity, threat of semi-tropical insects, and seasonal changes. Water for drinking and other purposes had to be provided, trees and shrubs brought to the island, and the various units and services of an independent estate provided.

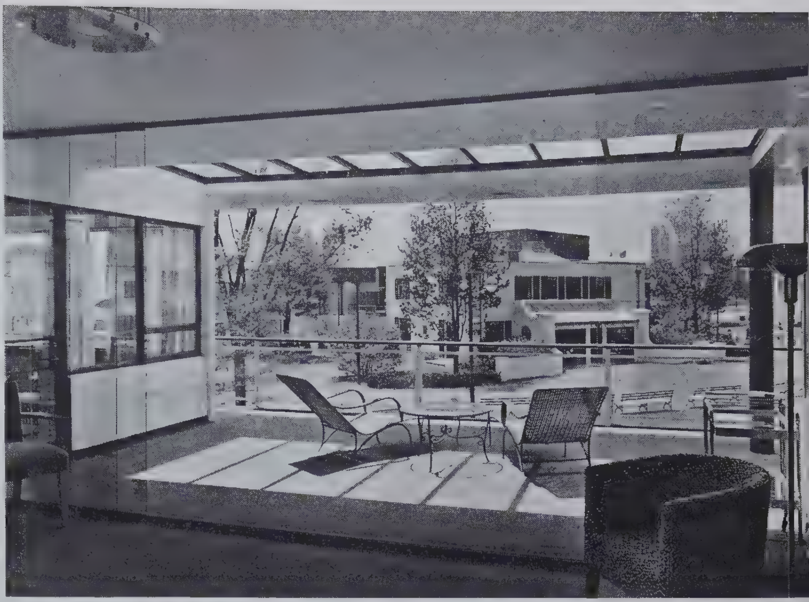
Again the architect spared no effort in the preliminary stages, making a complete model of the island and the buildings proposed to acquaint the clients with the design. In this way costly changes after work was begun were eliminated. Construction followed the traditional methods of Bermuda—coral limestone being quarried soft on the site (it hardens with exposure to the air) for walls and roof—and the style suggests the British colonial work on the other islands. The shutters, necessary for the storm season, are not as sharply silhouetted against the walls as the photographs indicate. Loggias, terraces, and sheltering masses of oleanders, hibiscus, and other shrubbery invite outdoor living.

A commission of an entirely different sort came to Hatch when he was chosen to design the "Bride's House" for the "Town of Tomorrow" at the New York World's Fair. It was intended to be a low-cost house that also could be maintained at minimum-cost. As the building was primarily an exhibit, manufacturers supplied a profusion of materials but Hatch points out that the same design could have been executed more simply for a client intending to occupy the house.

The plan features a "sun pocket" on the south where the occupants can enjoy the sun in winter, sheltered from winds; or by opening the doors behind the pocket and shading the pocket with an awning they can have a cool retreat in summer. All the rooms are well-ventilated and brought closer to the outdoors by a window-height planting border at either side. This unusual decorative element can be lighted at night from the roof overhang.

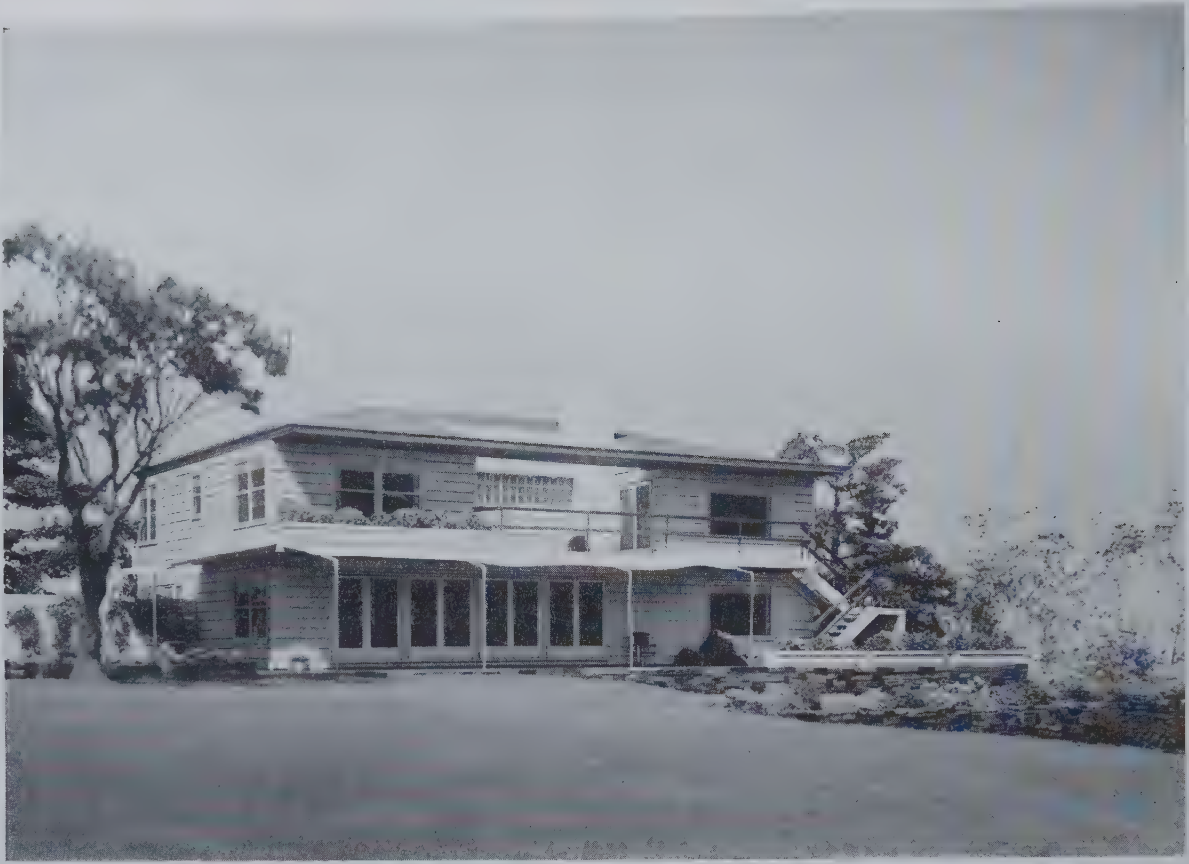
The house was built of black brick and asbestos siding with redwood trim, a black composition roof, and projected steel sash. The terrace was of cement flagging with grass joints, and the serpentine wall at the front of black brick. On the interior, redwood plywood, left natural color, was used, with a cork floor in the living room and a red-toned industrial asphalt tile floor in the entrance porch and bedrooms.

Two designs for the suburban house that must afford privacy from street traffic, but at the same time give the occupants a sense of indoor-outdoor living, were produced by Hatch for his Glass House at the New York World's Fair and for a suburban home in Connecticut, of which the model and plan are shown (pages 630-631). The house at the Fair was a frank expression in poured concrete glass block, and plate glass. But the character of the site and the desire of the client to adhere to the traditions of the

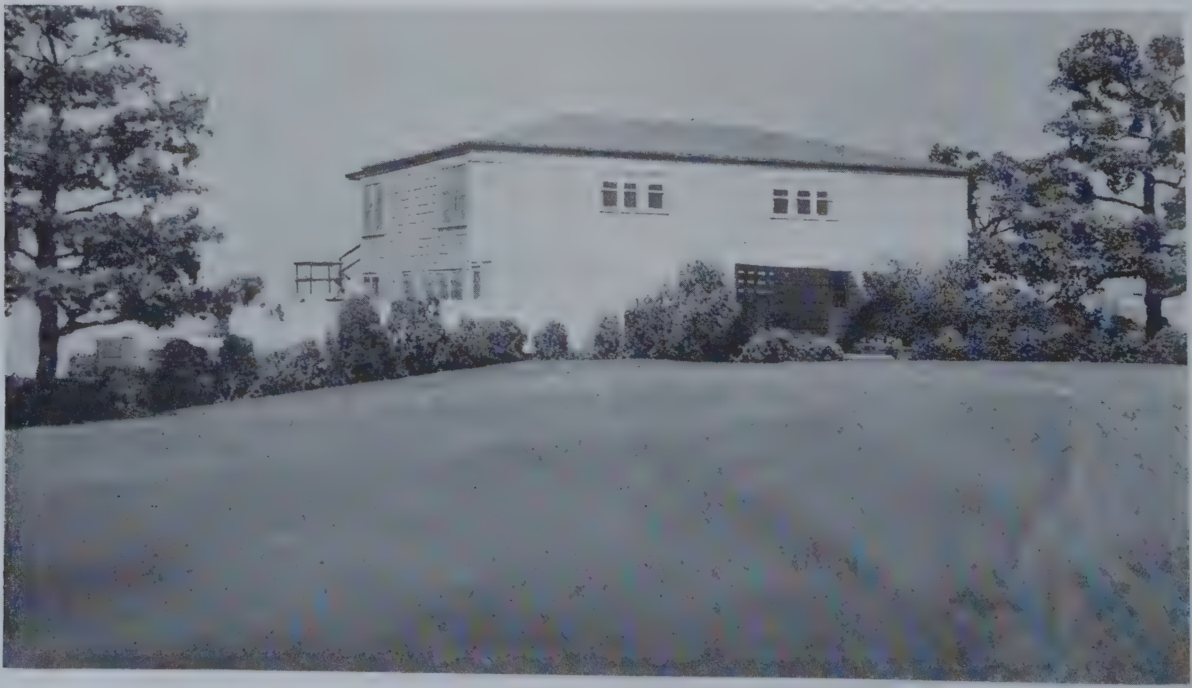


ON THE SECOND FLOOR, A "SUN POCKET" OVERLOOKING THE GARDEN MAKES A COMFORTABLE PLACE TO RELAX OUTDOORS IN WINTER. THE SAME SPOT IS COOL, SHADED IN SUMMER

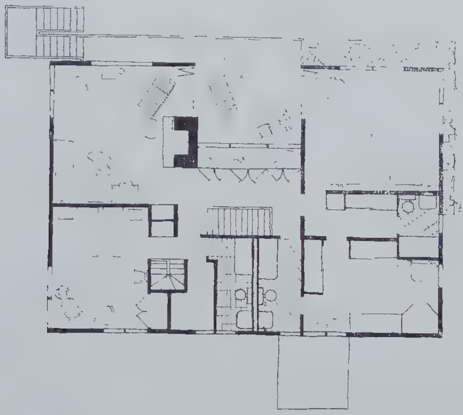
THE TWO PHOTOS AT THE RIGHT SHOW HOW DETAILED THE PRELIMINARY MODEL (ABOVE) WAS IN STUDY OF THE INTERIORS. THE SLIDING GLASS PARTITION IN THE BEDROOM WAS TO KEEP A DRESSING AREA WARM, YET RETAIN LIGHT AND OPENESS

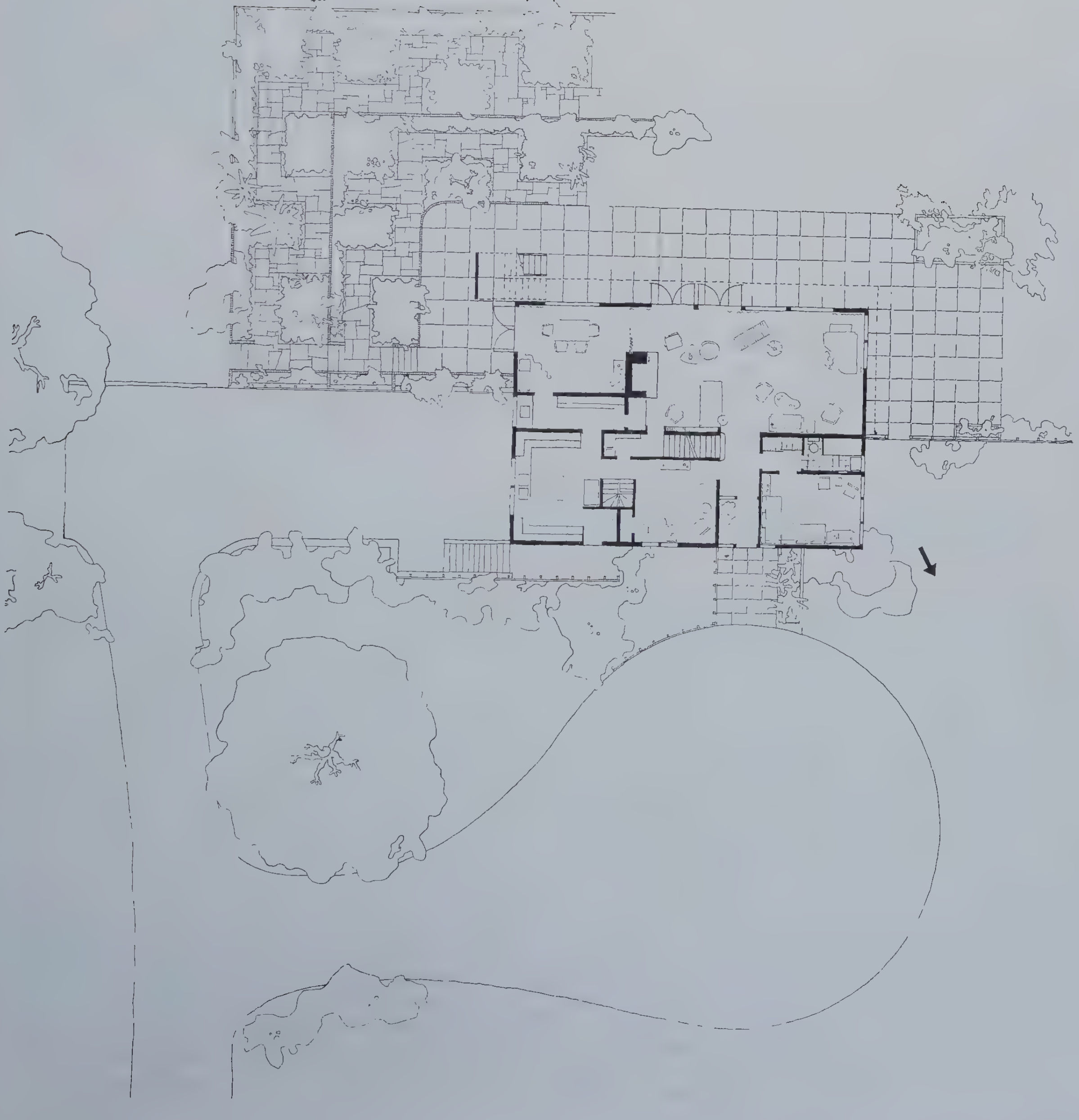


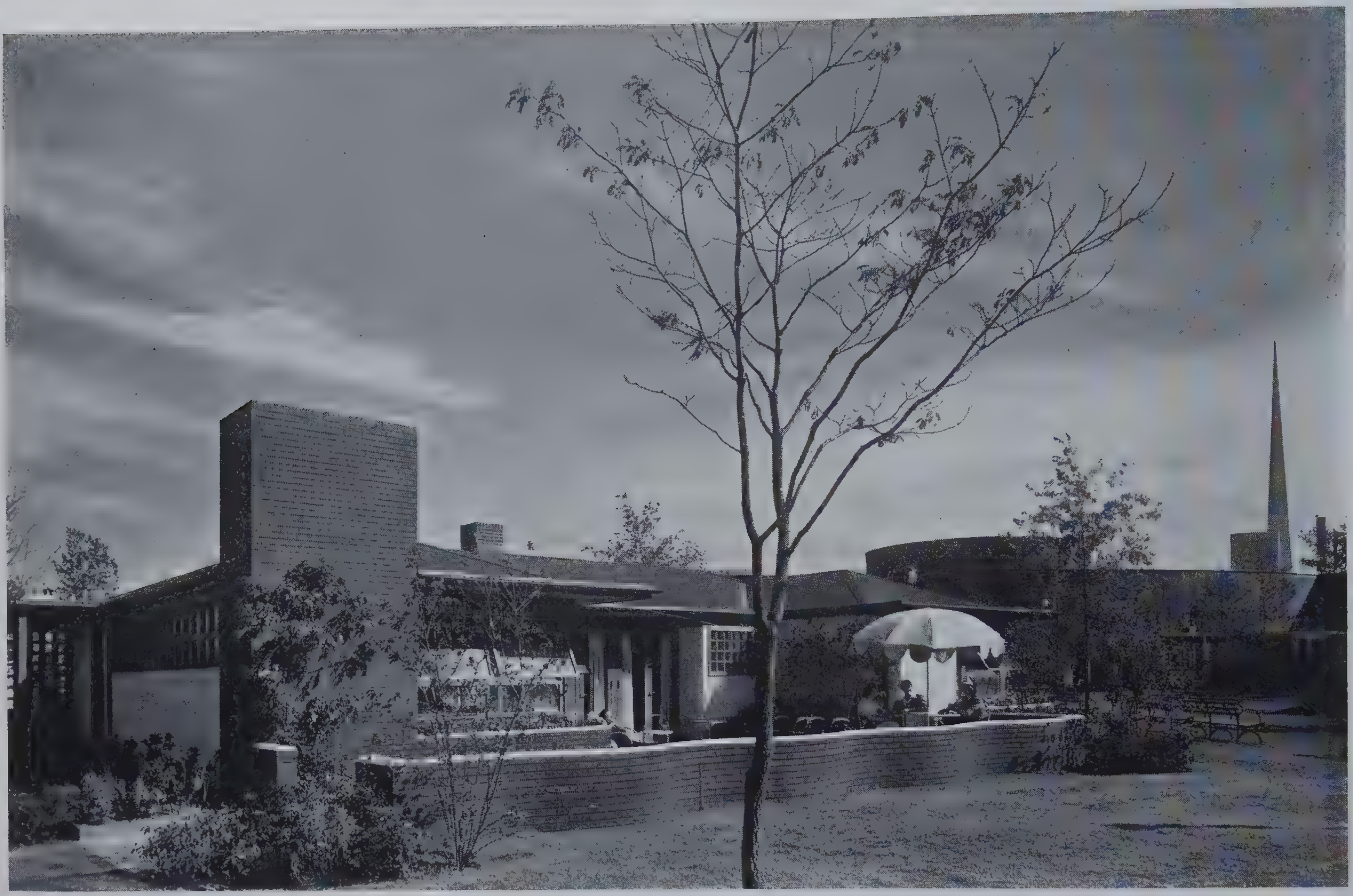
THE ADVANTAGES OF A MODERN HOUSE WERE ASKED BY THE OWNER OF THIS EXAMPLE OF HATCH'S RESIDENTIAL WORK. THE EXTERIOR OF THE FRAME BUILDING IS FINISHED WITH TEN-INCH WHITE PINE FLUSH SIDING WITH ONE-INCH RABBET. THE INTERIORS ARE OF PLASTER AND OAK PLYWOOD. ON THE SOUTH, OVERLOOKING THE GARDEN AND LONG ISLAND SOUND, THE ROOMS ARE OPEN ON THE SECOND FLOOR TO THE SUN-POCKET AND BELOW TO THE TERRACE AND GARDEN. THE STREET FRONT HAS FEW WINDOWS, IS SOMEWHAT FORMAL



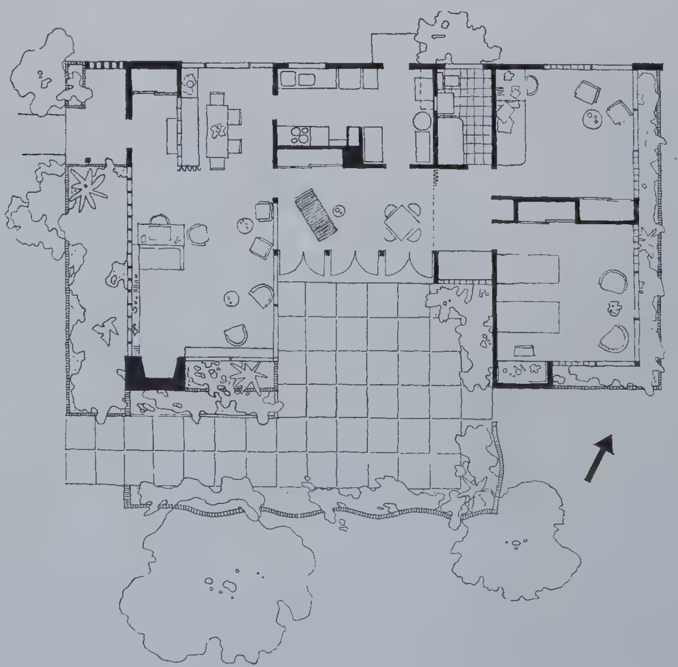
Connecticut countryside suggested a modification of the exterior of the second house. In both, the street front is on the north side, naturally lending itself to a formal treatment, while the garden fronts on the south are open and invite comfortable informal living. Again the "sun pocket" makes its appearance and lends interest to both designs.





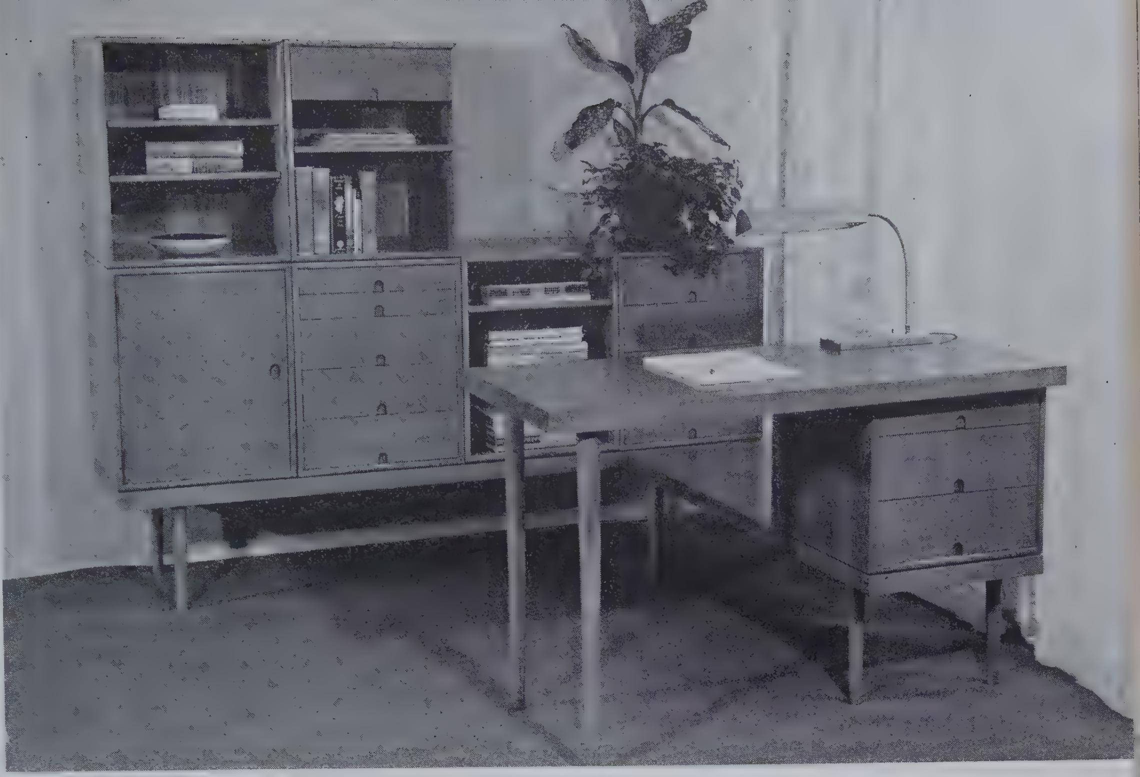


THE "BRIDE'S HOUSE" ALSO WAS DESIGNED FOR THE "TOWN OF TOMORROW" AT THE NEW YORK WORLD'S FAIR, TO DEMONSTRATE PLANNING FOR LOW-COST, LOW-MAINTENANCE. IT WAS UNUSUALLY OPEN ON THE SOUTH, FOR WINTER SUN AND SUMMER BREEZES, THE SERPENTINE WALL AND WINDOW-HEIGHT FLOWER BEDS GAVE SPECIAL INTEREST. AS IT WAS AN EXHIBITION HOUSE, A VARIETY OF MATERIALS WAS USED. NOTE BLACK BRICK AND ASBESTOS SIDING

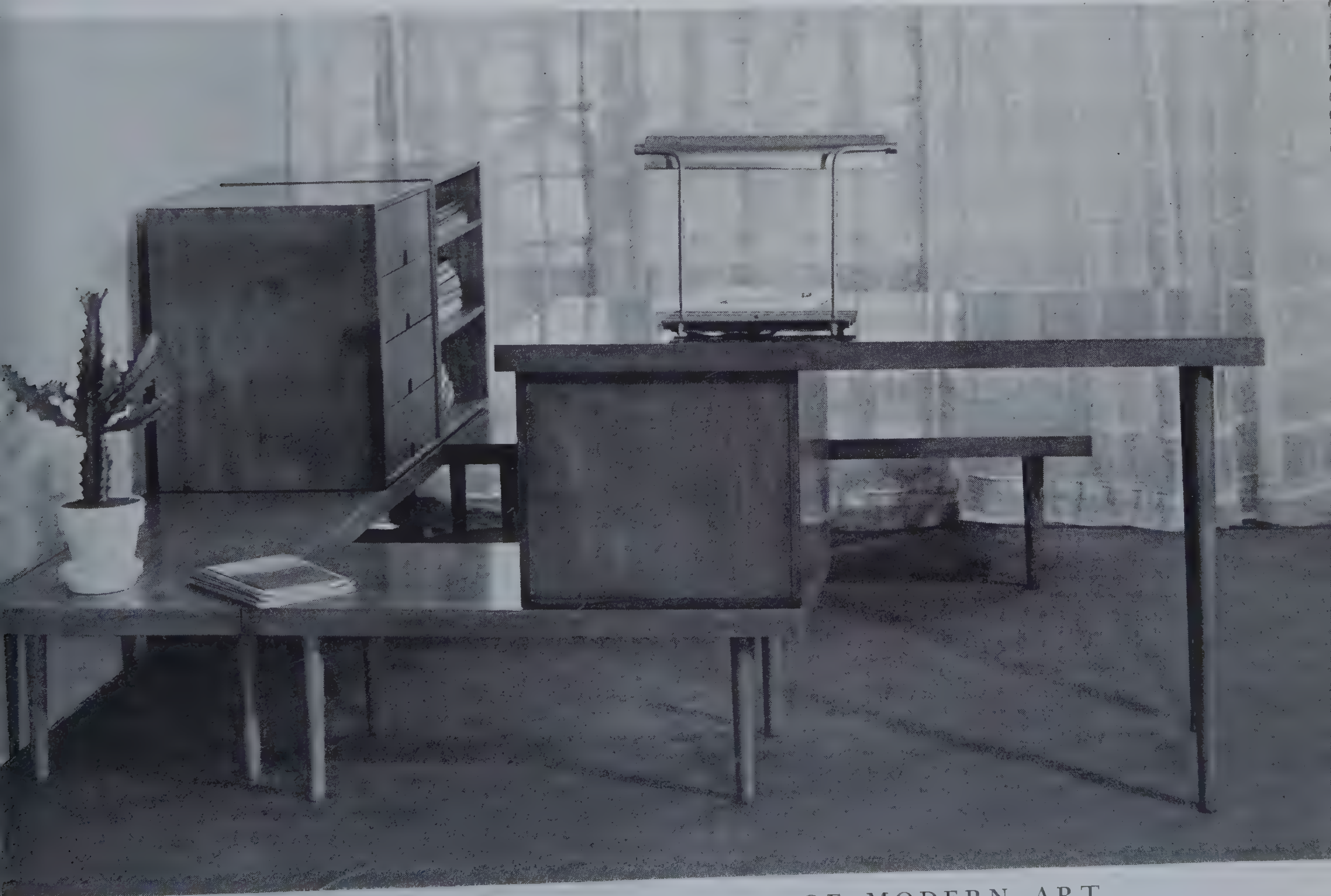


THE BRIDE'S HOUSE, NEW YORK WORLD'S FAIR – BY DON HATCH

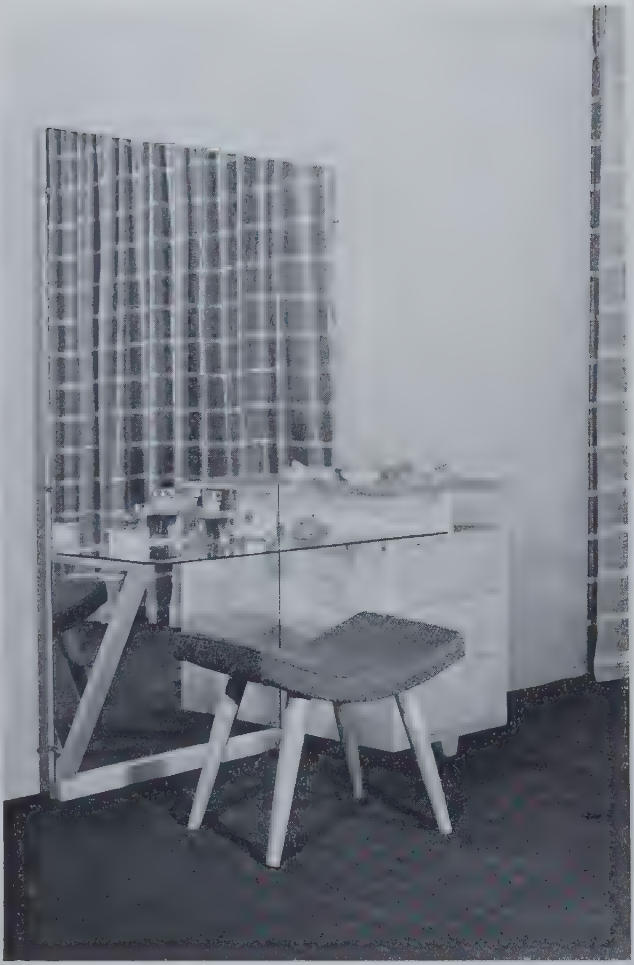
UNIT FURNITURE OF MULTIPLE USE, WHICH MAY BE ARRANGED IN A GREAT NUMBER OF COMBINATIONS, WON FOR EERO SAARINEN AND CHARLES O. EAMES THE COMPETITION PRIZE FOR LIVING ROOM FURNITURE. EXECUTED IN HONDURAS MAHOGANY, THE CASEWORK IS FINISHED ON THE BACK SO THAT ANY SIDE MAY FACE OUTWARD. THE LAMP IN THE TOP PHOTOGRAPH WON FOR PETER PFISTERER THE PRIZE IN THE MOVABLE LIGHTING EQUIPMENT CATEGORY

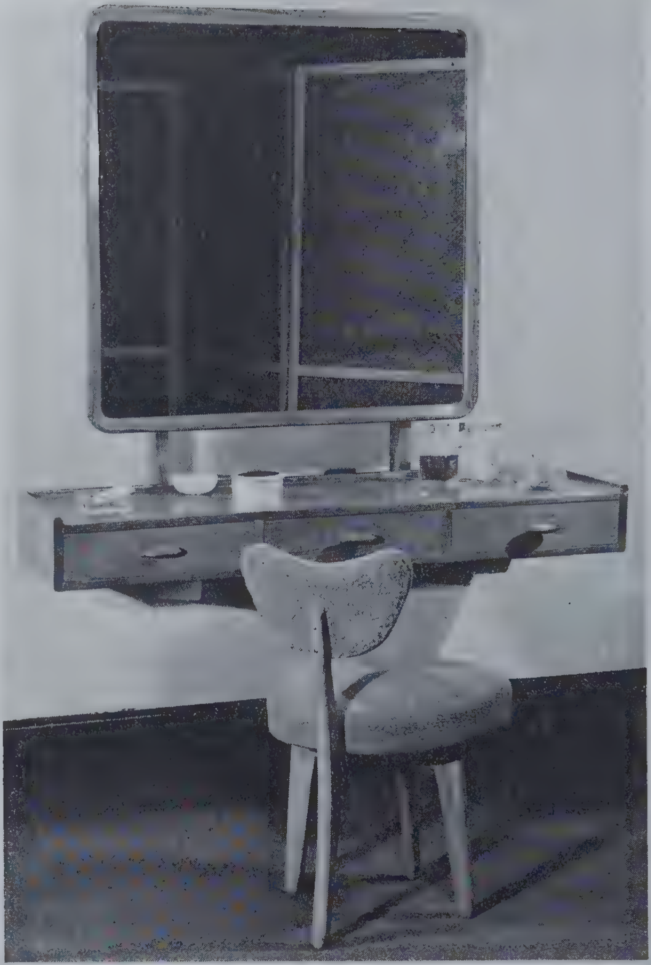


ORGANIC DESIGN IN HOME FURNISHINGS

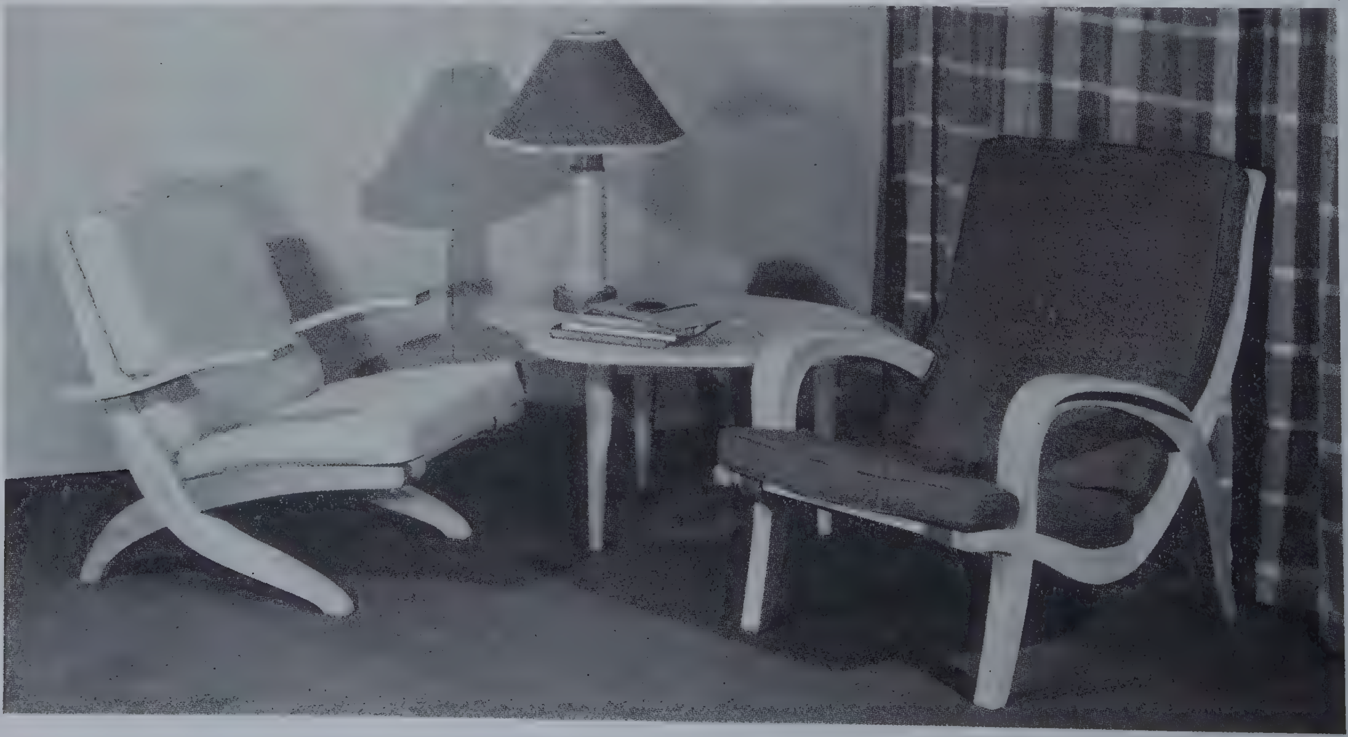


EXHIBITED SEPT. 24-NOV. 9 AT MUSEUM OF MODERN ART



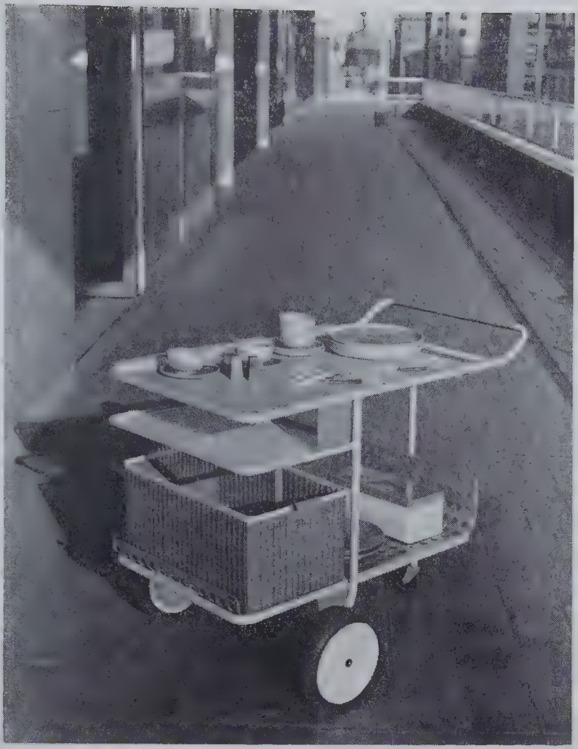


MARTIN CRAIG AND ANN HATFIELD WON THE ONE-ROOM APARTMENT FURNITURE COMPETITION. THEY DESIGNED THE MIRRORED BIRCH VANITY AND BENCH (LEFT ABOVE). A FRAME HUNG FROM THE WALL SUPPORTS THE THREE-DRAWER, GRAY-TONED WALNUT UNIT AND MIRROR (ABOVE RIGHT), BEDROOM UNIT WINNER DESIGNED BY OSCAR STONOROV AND WILLO VON MOLTKE. EMRICH NICHOLSON AND DOUGLAS MAIER WON HONORABLE MENTION FOR LIVING ROOM SEATING (LOWER LEFT). THE BIRCH CHAIR (LOWER RIGHT) AND THE THREE-LEGGED COFFEE TABLE ARE CRAIG AND HATFIELD DESIGNS. FABRICS ON ALL THE CHAIRS WON THE FABRIC PRIZE FOR MARLI EHRMAN. (ALBERT FENN PHOTOS COURTESY BLOOMINGDALE'S)

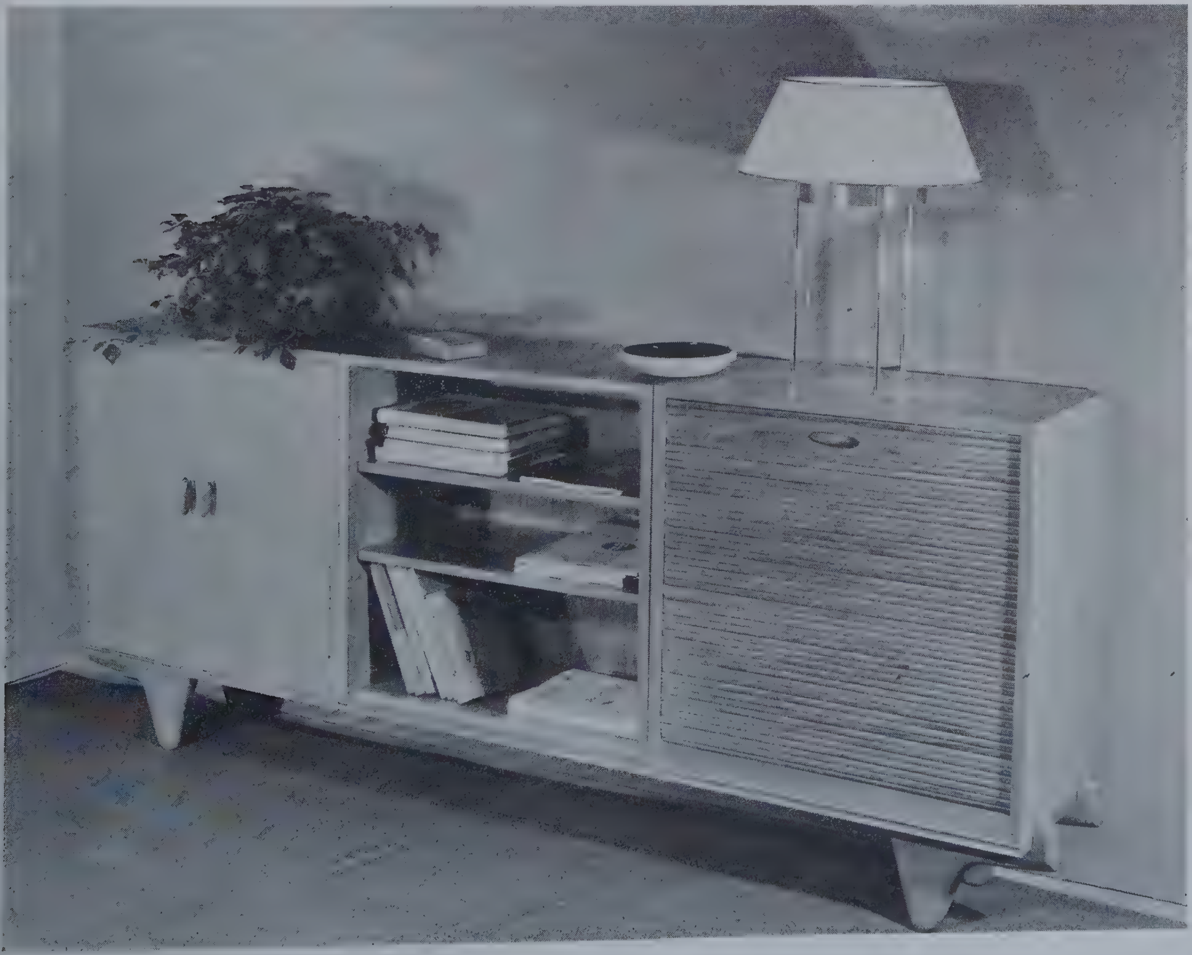


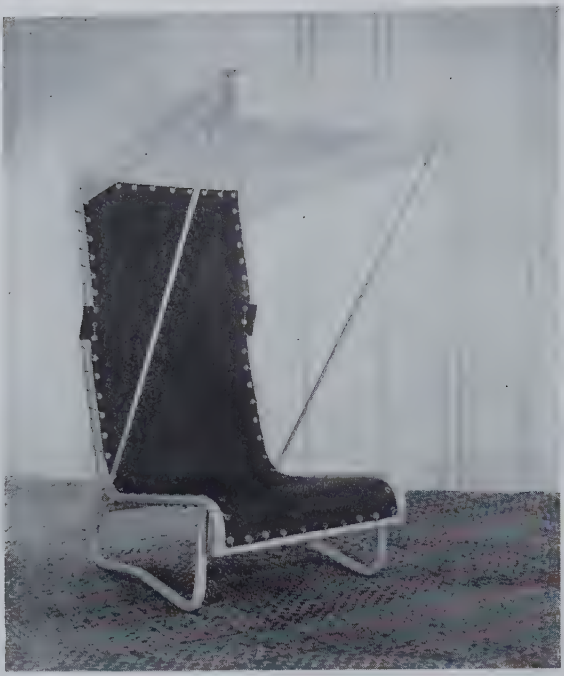
LAST OCTOBER THE MUSEUM OF MODERN ART, DEPARTMENT OF INDUSTRIAL DESIGN, ELIOT NOYES, DIRECTOR, INAUGURATED AN INTER-AMERICAN COMPETITION FOR THE DESIGN OF FURNITURE, FABRICS, AND LAMPS. TWELVE DEPARTMENT STORES THROUGHOUT THE COUNTRY SPONSORED THE COMPETITION TO DISCOVER GOOD DESIGNERS, ENGAGE THEM TO CREATE A BETTER ENVIRONMENT FOR TODAY'S LIVING. CONTRACTS WITH FURNITURE MANUFACTURERS WERE OFFERED COMPETITION WINNERS. A SPECIAL DIVISION OF THE COMPETITION WAS HELD FOR DESIGNERS IN LATIN-AMERICAN REPUBLICS WHO CONCENTRATED ON OUTDOOR FURNITURE, AND UTILIZED NATIVE WOODS, TEXTILES, FIBRES, AND HIDES

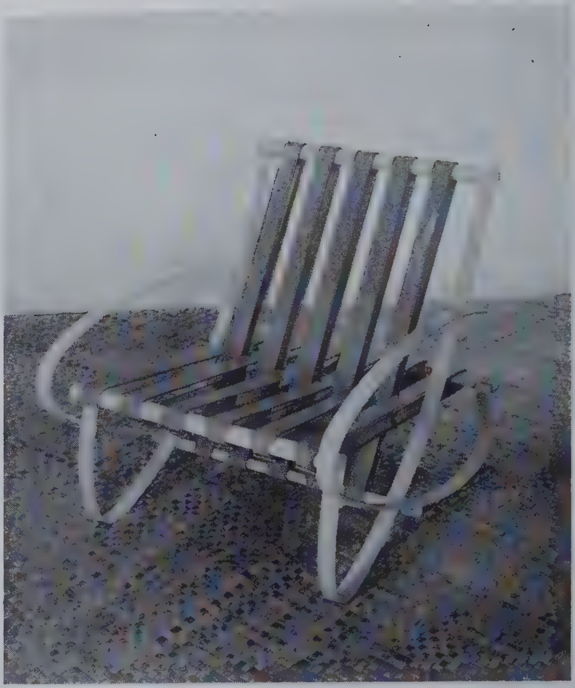
"A design may be called organic when there is an harmonious organization of the parts within the whole, according to structure, material, purpose"
ELIOT NOYES



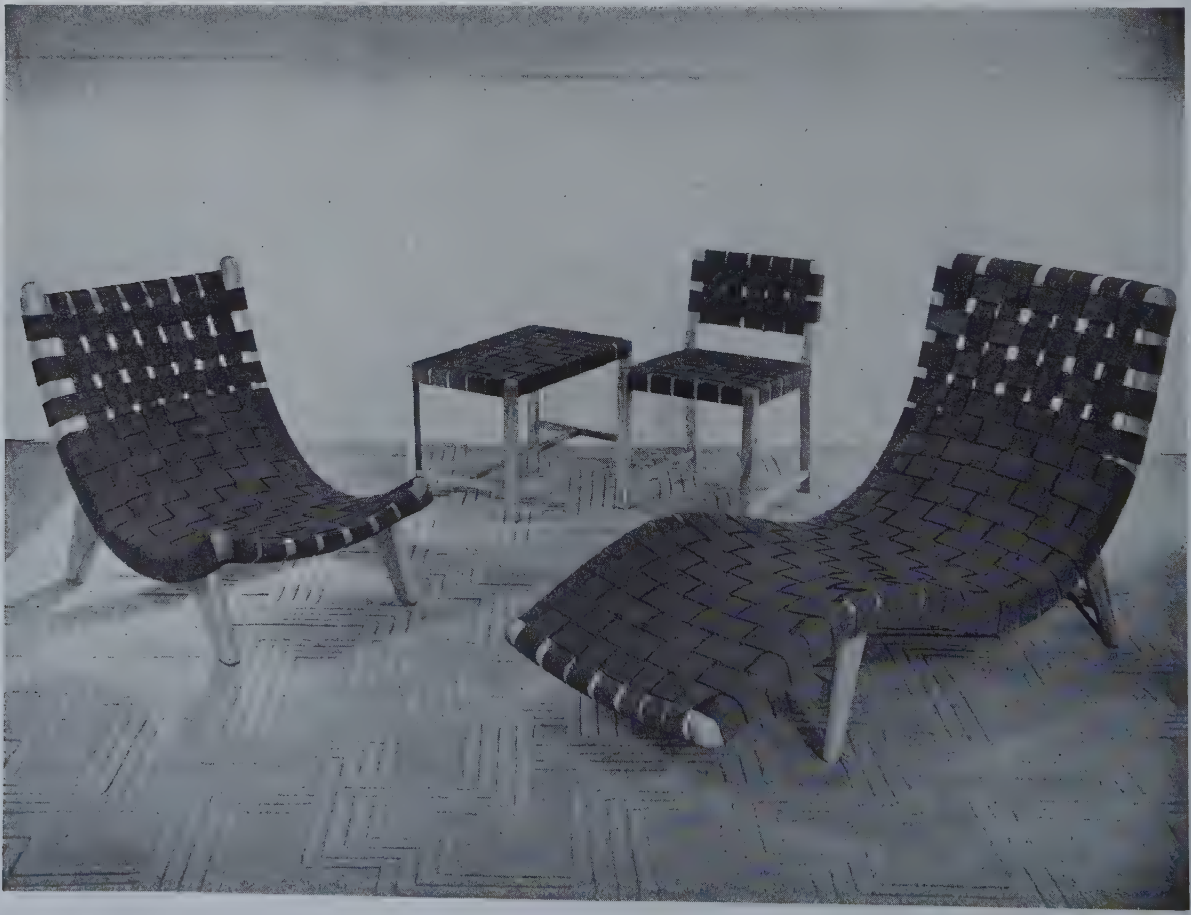
WINNERS IN THE COMPETITION FOR FURNITURE FOR OUTDOOR LIVING WERE HARRY WEESE AND BENJAMIN BALDWIN. THEIR TEA WAGON (ABOVE) IS OF TUBULAR STEEL WITH PNEUMATIC TIRES, REMOVABLE TRAYS, WICKER BASKET. OSCAR STONOROV AND WILLO VON MOLTKE WON THE COMPETITION FOR BEDROOM FURNITURE. THEIR GRAY WALNUT COMBINATION CASE SHOWN BELOW IS FLEXIBLE, INTERCHANGEABLE, AND MAY BE MOUNTED ON INTERESTING STRUCTURAL BASES. THE LEFT UNIT HAS STORAGE SHELVES BEHIND CUPBOARD DOORS; THE CENTER UNIT HAS OPEN SHELVES, OR SLIDING TRAYS IF DESIRED; THE RIGHT HAND UNIT HAS A TAMBOUR FRONT CONCEALING SHELVES BEHIND. ANY ONE, TWO, OR THREE OF THE UNITS MAY BE USED

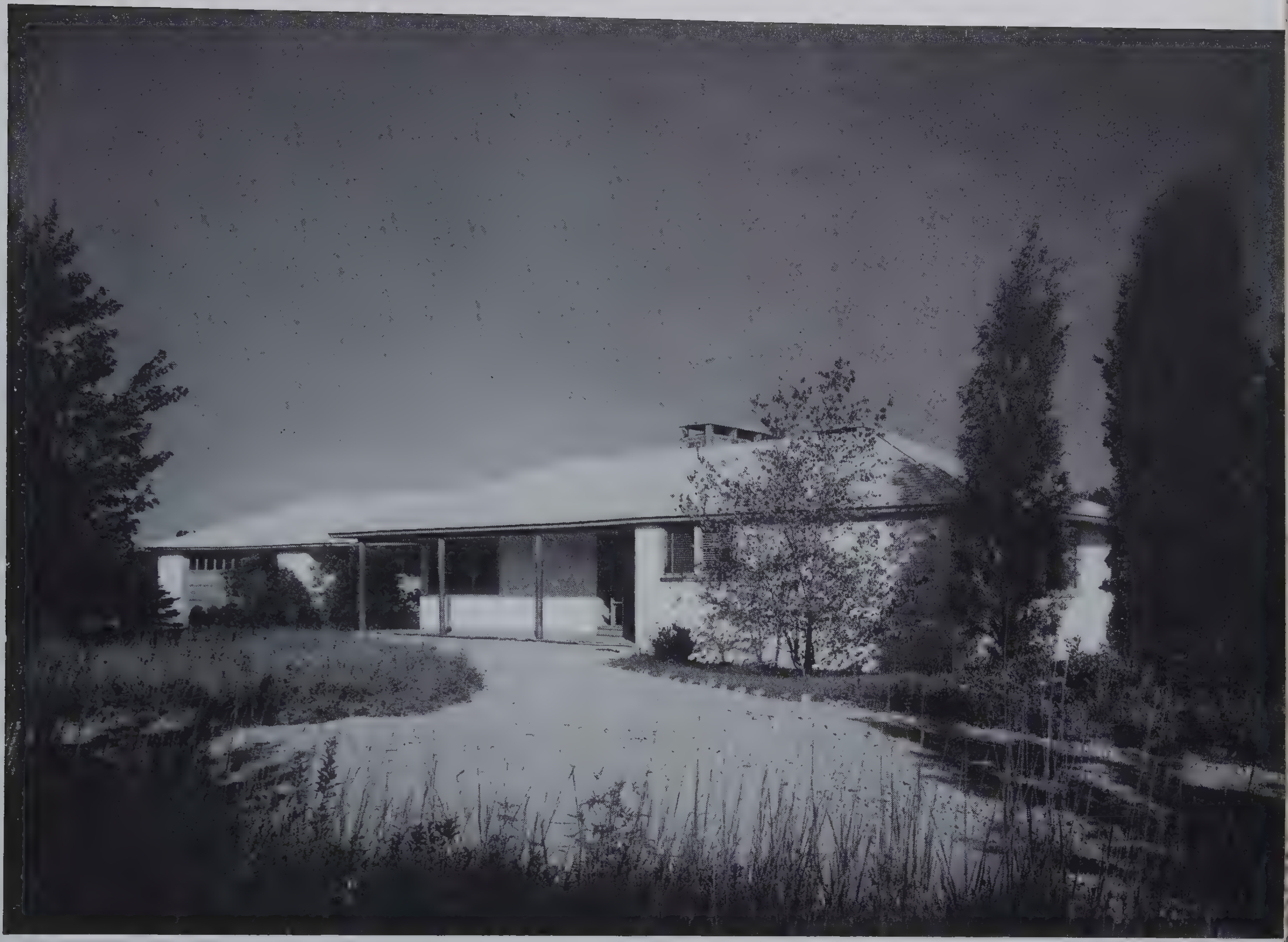






FIVE PRIZEWINNERS FROM BRAZIL, ARGENTINA, URUGUAY, AND MEXICO ARE REPRESENTED BY FURNITURE INTRODUCING NATIVE WOODS, TEXTILES, FIBRES, AND HIDES. WHEREVER MANUFACTURING FACILITIES EXISTED, THE FURNITURE WAS PRODUCED IN THE DESIGNER'S HOME COUNTRY. IN SOME CASES NATIVE MATERIALS WERE IMPORTED AND THE FURNITURE MADE HERE. THE CHAIR FOR OUTDOOR LIVING (UPPER LEFT) WAS DESIGNED BY BERNARDO RUDOFSKY, SAO PAULO, BRAZIL. AT THE UPPER RIGHT IS THE DESIGN OF ROMAN FRESNEDO, MONTEVIDEO, URUGUAY. THE CHAIR UTILIZES LEATHER STRAPS ON STEEL FRAMES. THE CHAIRS AND SMALL TABLE IN THE LOWER PHOTOGRAPH REPRESENT THE WORK OF MICHAEL VAN BEUREN, KLAUS GRABE, AND MORLEY WEBB, OF MEXICO CITY. MADE OF PRIMAVERA WOOD AND WOVEN MECATE TAPE, IT IS ONE OF A GROUP OF DESIGNS FROM MEXICO. OTHER PRIZEWINNERS INCLUDED JULIO VILLALOBOS, BUENOS AIRES, ARGENTINA; XAVIER GUERRERO, MEXICO. (ALLAN RICHARDSON PHOTOS COURTESY MODERN MUSEUM)





BEYOND THE PORCH THE GRAVELED DRIVE WIDENS BEFORE THE DOUBLE GARAGE, WITH 16-FOOT STOCK DOOR

RESIDENCE IN CONNECTICUT

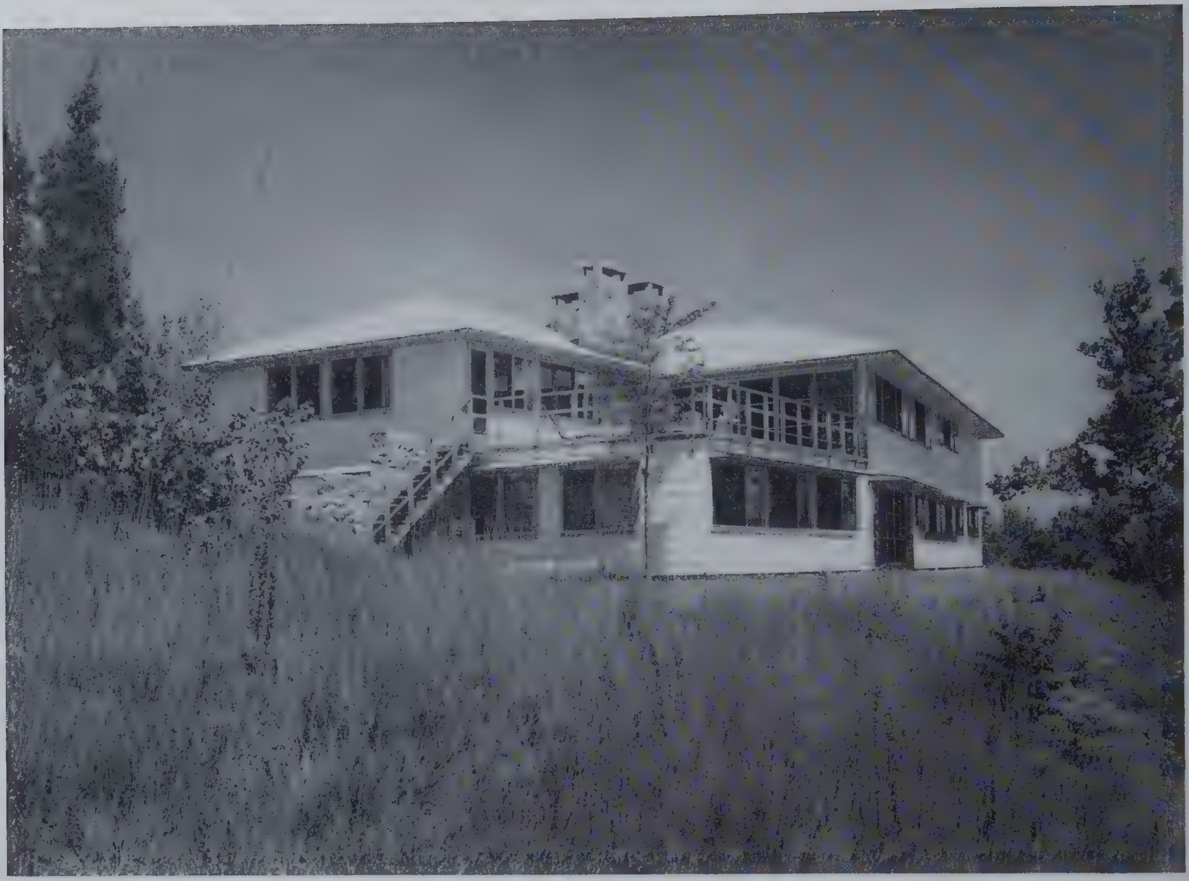
DESIGNED BY ANTONIN RAYMOND, ARCHITECT

Before making the first sketch toward design of a home for Mr. and Mrs. J. Delano Hitch and family, at Westport, Connecticut, Architect Antonin Raymond persuaded them to list their "likes" and "dislikes" in a house. To the architect, the most important considerations were to locate the house to best advantage on the property, as regards view and orientation, and to design for utilization of the stock sizes of stock materials, effecting a major economy in construction. The result is that the house is largely open on the south, facing the view and sunshine, but has few windows on the north side which faces the road. This has measurably reduced heating cost in the winter. Edwin Harris, Jr., head of Raymond's New York office, collaborated in the design and superintended construction. The contractors were Thompson & Hawley, of Bridgeport, Connecticut.

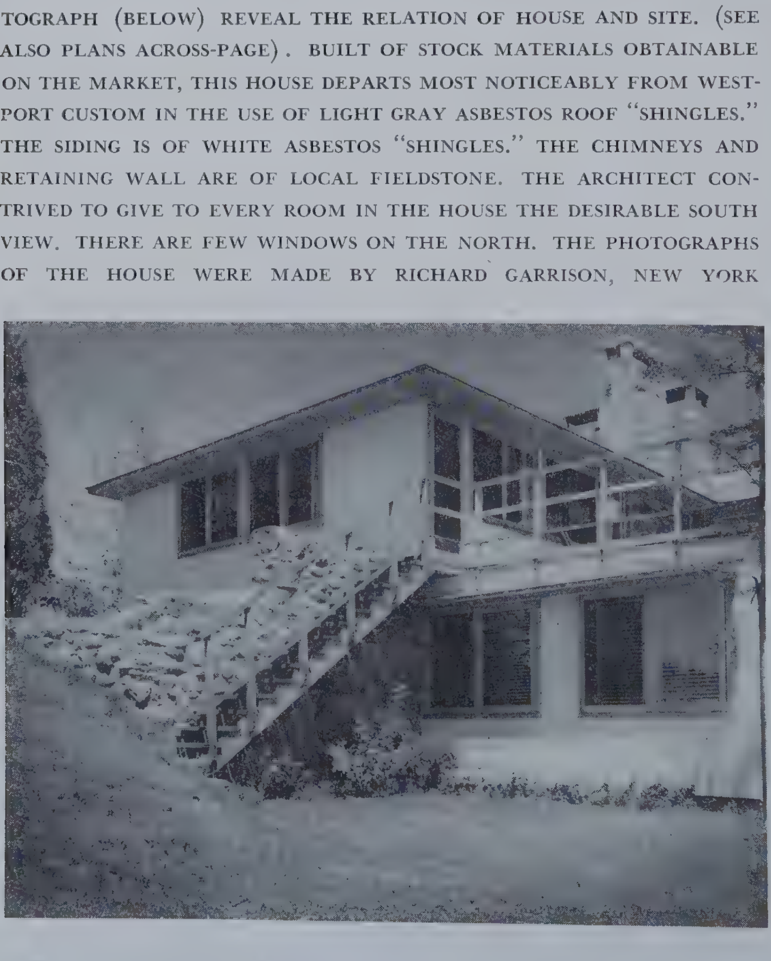
The clients' lists served as a basis for discussion with the architect, then later as the house was studied and there were further conferences it became apparent that the clients were going to get what they wanted—in some respects more than they had expected.

LIKES were cross-ventilation, well-lighted kitchen shelves, plenty of electric outlets,

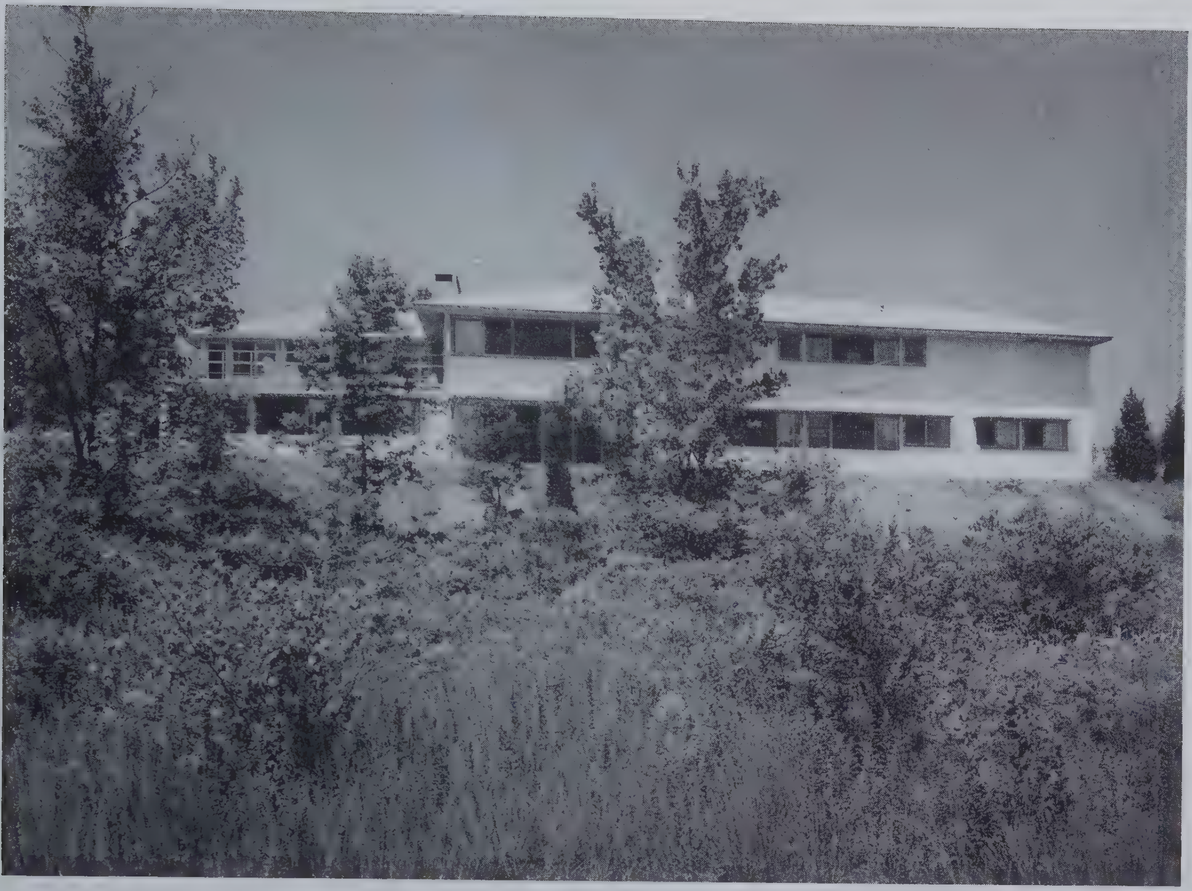
(Continued on page 644)

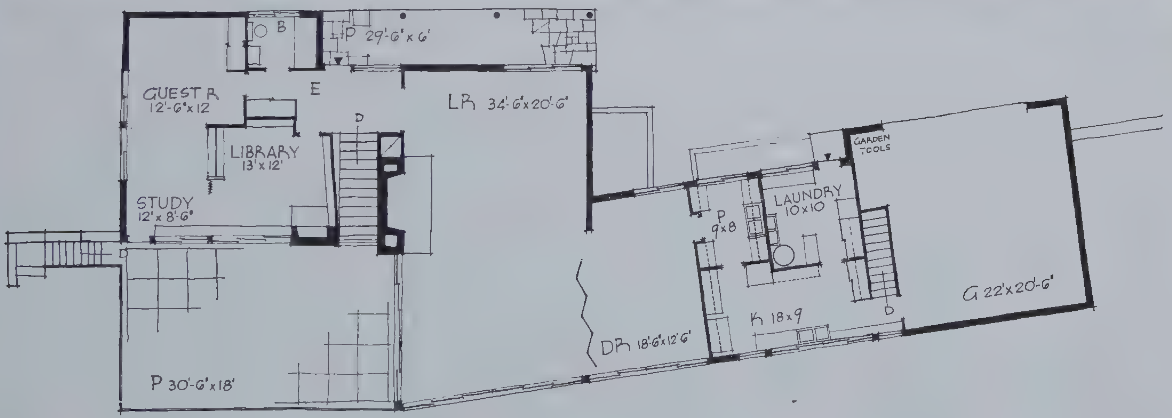


THIS VIEW FROM THE SLOPE BELOW THE HOUSE AND THE DETAIL PHOTOGRAPH (BELOW) REVEAL THE RELATION OF HOUSE AND SITE. (SEE ALSO PLANS ACROSS-PAGE). BUILT OF STOCK MATERIALS OBTAINABLE ON THE MARKET, THIS HOUSE DEPARTS MOST NOTICEABLY FROM WESTPORT CUSTOM IN THE USE OF LIGHT GRAY ASBESTOS ROOF "SHINGLES." THE SIDING IS OF WHITE ASBESTOS "SHINGLES." THE CHIMNEYS AND RETAINING WALL ARE OF LOCAL FIELDSTONE. THE ARCHITECT CONTRIVED TO GIVE TO EVERY ROOM IN THE HOUSE THE DESIRABLE SOUTH VIEW. THERE ARE FEW WINDOWS ON THE NORTH. THE PHOTOGRAPHS OF THE HOUSE WERE MADE BY RICHARD GARRISON, NEW YORK

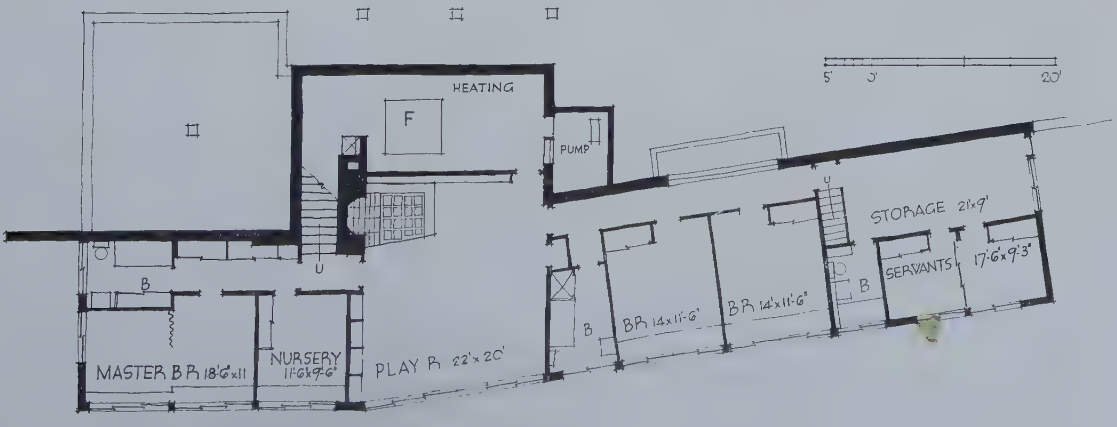


HOUSE IN CONNECTICUT—BY ANTONIN RAYMOND, ARCHITECT





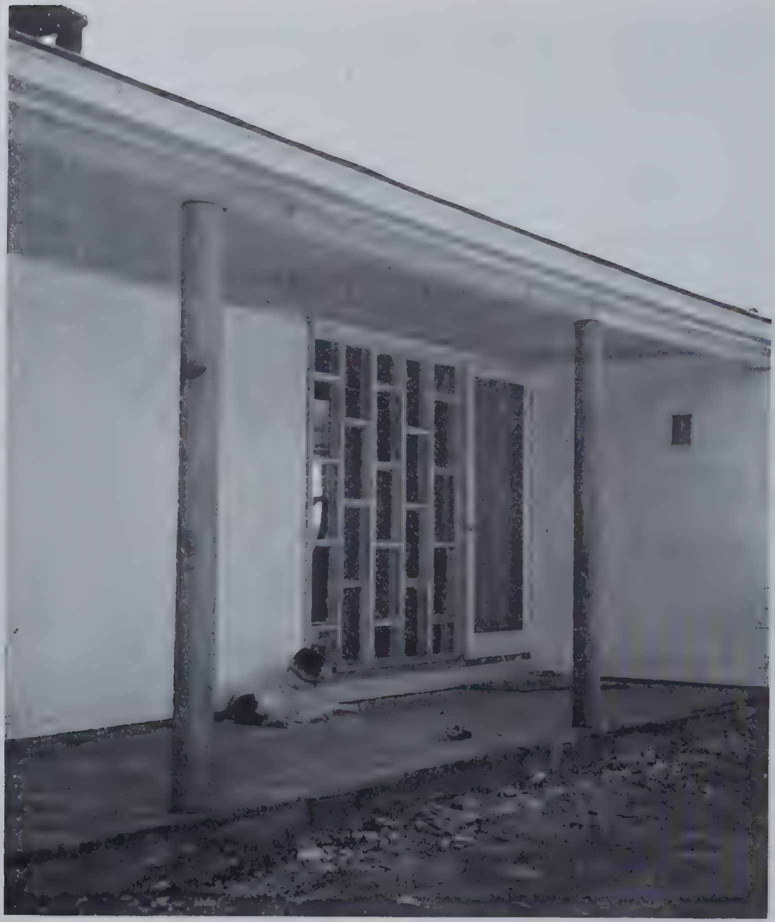
FIRST FLOOR



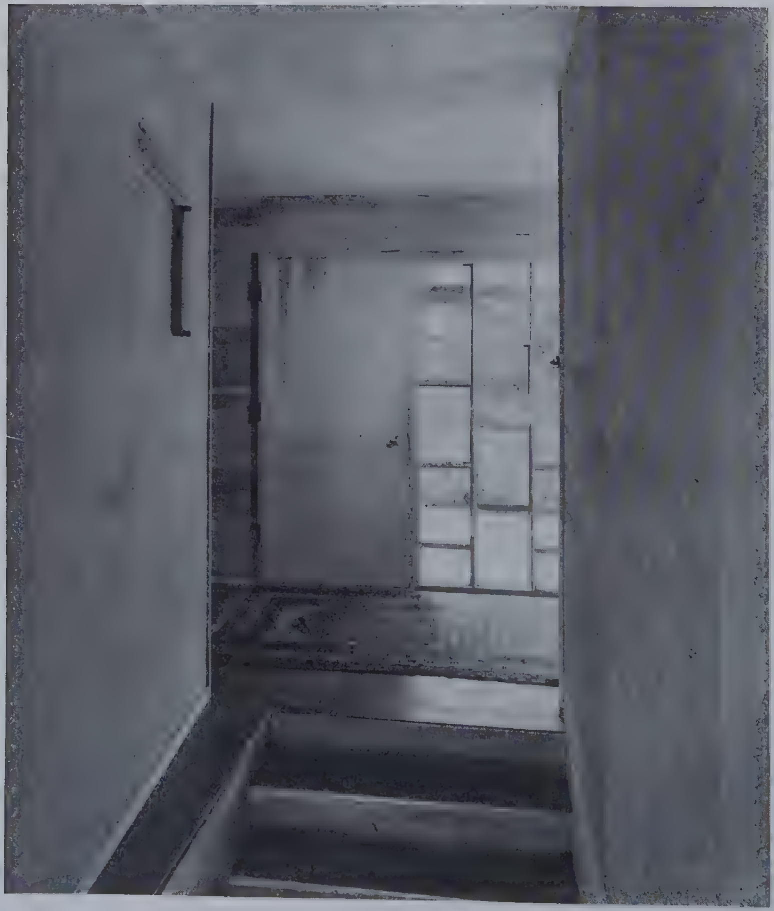
GROUND FLOOR

HOUSE IN CONNECTICUT—BY ANTONIN RAYMOND, ARCHITECT

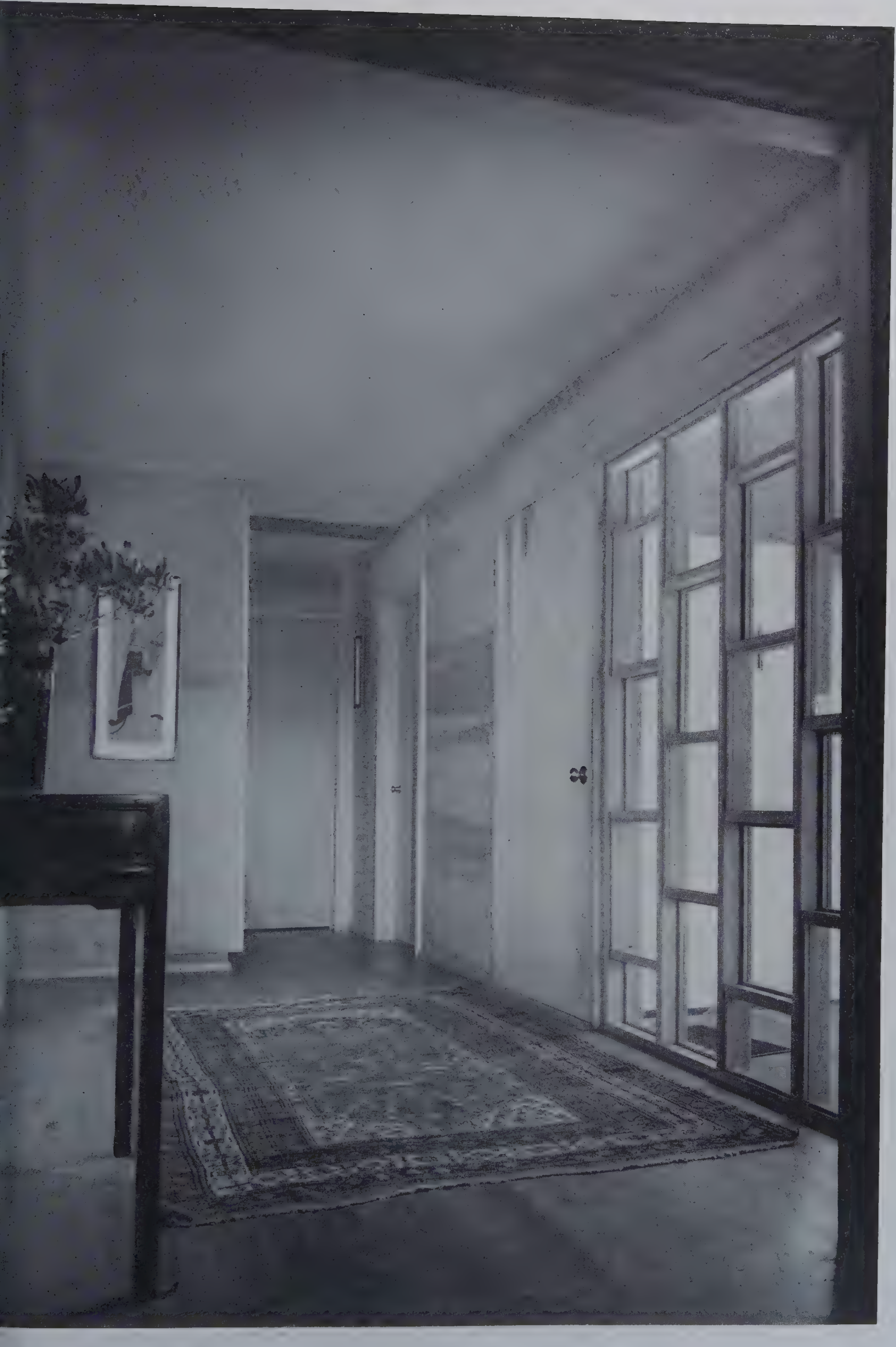
Photo by Kenneth Reid



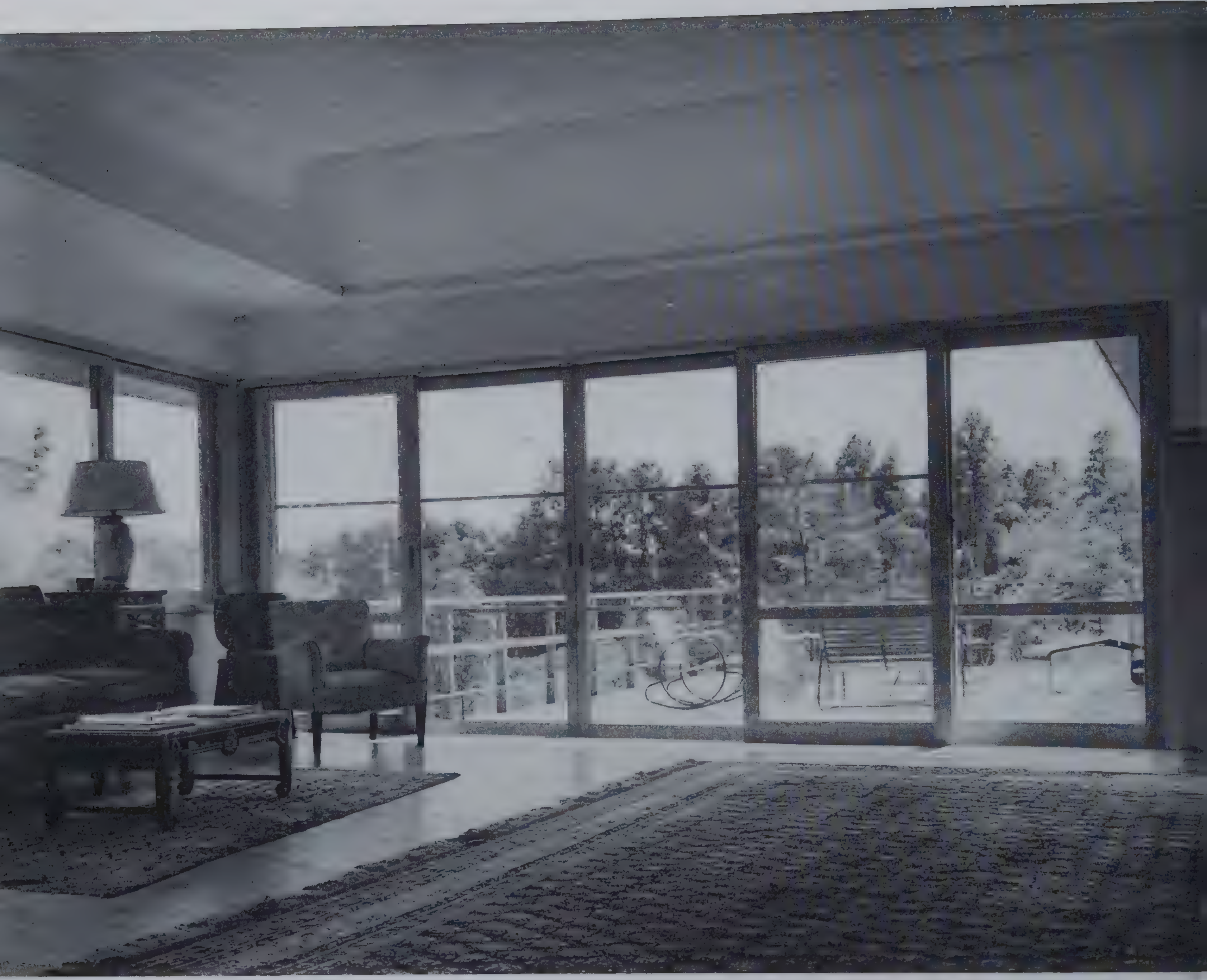
THE INVITING DOORWAY AND HALL WINDOW ARE PROTECTED FROM WEATHER BY A SIMPLE PORCH. FINISHED IN 1/4" PLYWOOD WITH FLOOR OF OAK, THE HALL SEEMS SPACIOUS BUT IS ACTUALLY NO WIDER THAN REQUIRED BY ITS UTILITY AS ENTRANCE HALL AND PASSAGE. THE STAIR IS WELL-LIGHTED BY A WINDOW ABOVE (FROM WHICH THE LOWER PHOTO WAS MADE). THE SAME WINDOW AFFORDS A VIEW, THROUGH THE HOUSE FROM THE FRONT DOOR, OF THE VALLEY AT THE BACK OF THE RESIDENCE

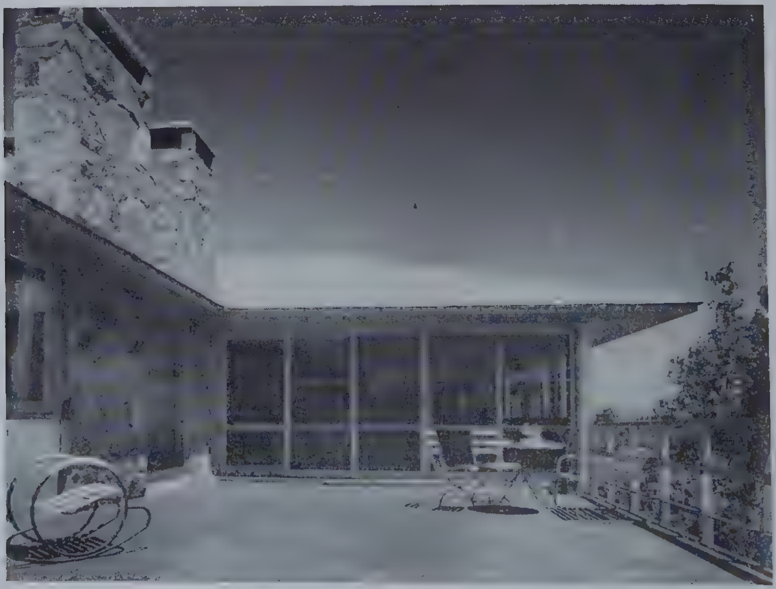


HOUSE IN CONNECTICUT—BY ANTONIN RAYMOND, ARCHITECT



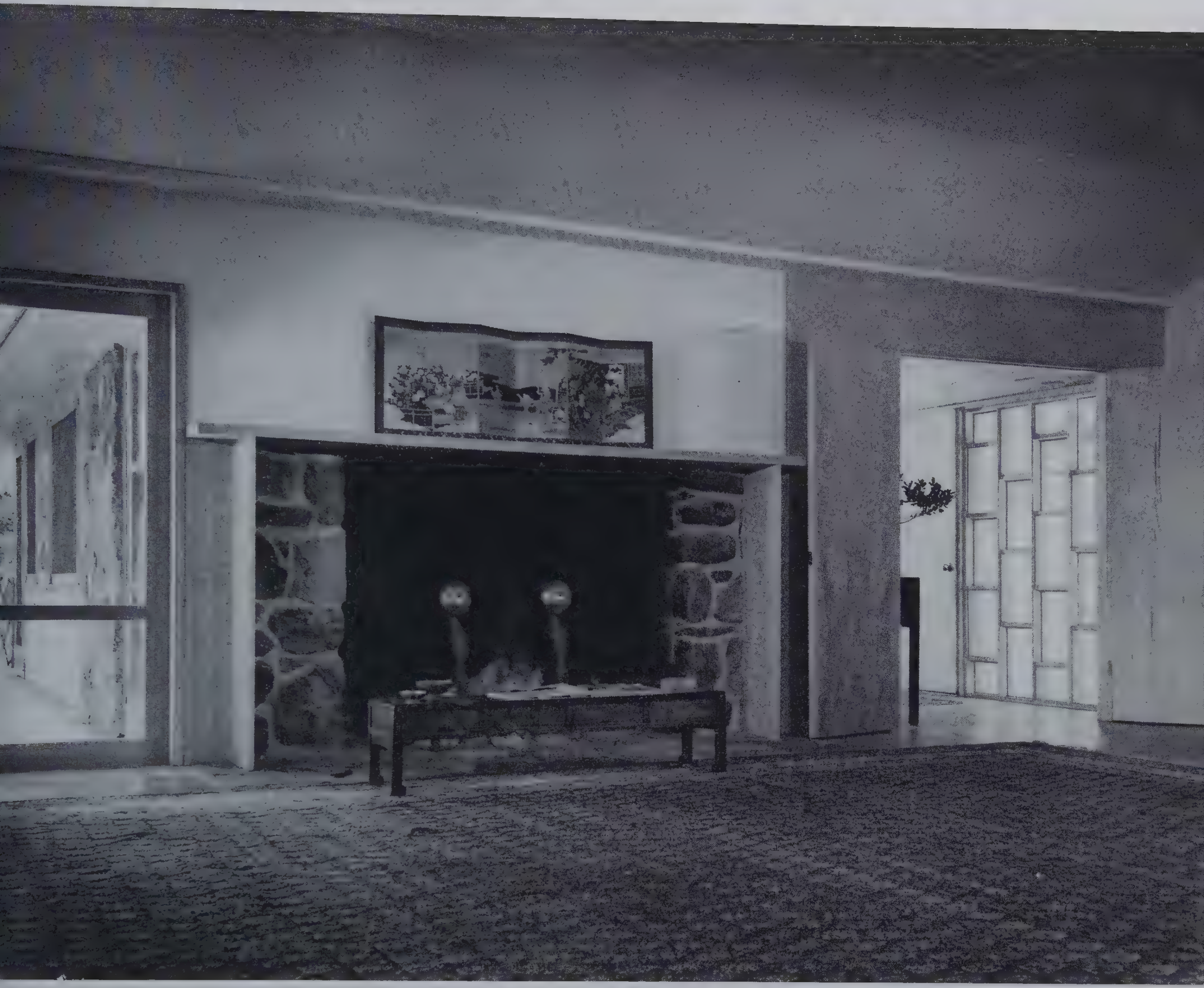
HOUSE IN CONNECTICUT—BY ANTONIN RAYMOND, ARCHITECT



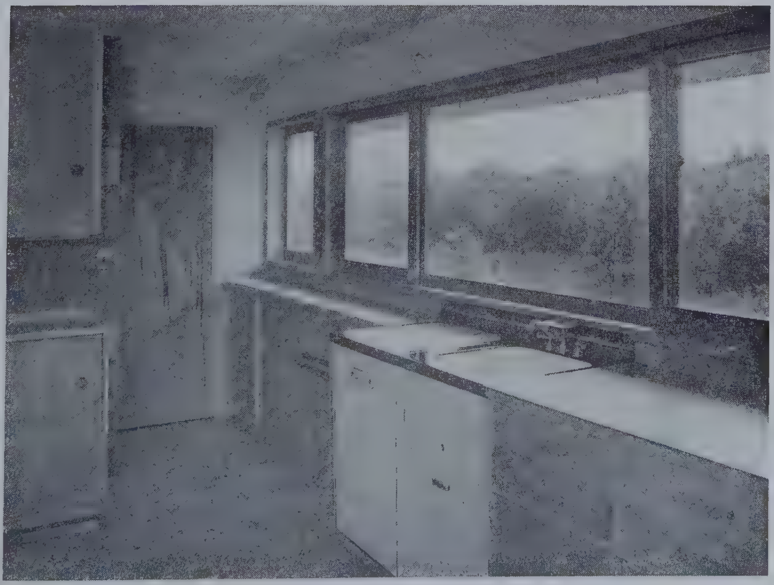


AN IMPRESSION OF THE OPENNESS OF THE LIVING ROOM IS GIVEN BY THESE OVERLAPPING PHOTOGRAPHS OF THE WEST, OR FIREPLACE, WALL. THE BROAD TERRACE SEEN THROUGH THE SLIDING DOORS FURTHER EMPHASIZES THE SPACIOUSNESS OF THE LIVING AREA. ON THE OTHER SIDE OF THE ROOM THE DINING ROOM IS COMPLETELY OPEN. NOTE ALSO THAT THERE IS A CONTINUOUS GLASS AREA ON THE SOUTH WALL OF BOTH ROOMS, TAKING ADVANTAGE OF A WIDE VIEW OF THE WINDING SAUGATUCK RIVER AND THE VALLEY. THE HOUSE WAS PLACED TO OPEN ALL ROOMS TO THE VIEW

HOUSE IN CONNECTICUT—BY ANTONIN RAYMOND, ARCHITECT



THE KITCHEN SHARES THE VIEW OF THE RIVER AND VALLEY, THROUGH A STRIP OF WINDOWS ABOVE THE SINK AND WORK COUNTERS. TOPS OF THEM ARE STOCK SIZE SHEETS OF TRANSITE. THE CLIENT STRESSED A DESIRE FOR AMPLE CUPBOARD SPACE AND SHELVING IN BOTH THE KITCHEN AND PANTRY. ADJACENT ARE THE SERVICE ROOM OR LAUNDRY (SEE PLAN, PAGE 639) AS WELL AS THE GARAGE AND TOOL STORAGE, AND THE STAIR TO SERVANTS' ROOMS. FLOORS ARE LINOLEUM IN THE KITCHEN, PANTRY, AND BATHS. SOFFITS OF ROOF OVERHANG ARE FACED WITH PLYWOOD



HOUSE IN CONNECTICUT—BY ANTONIN RAYMOND, ARCHITECT

(Continued from page 637)

maximum light and sunshine, electric lights in closets, conveniently-located telephone outlet plugs, white (not colored) bathrooms, walls that could be painted or papered if a change is desired, and possibly a Japanese Style room. The clients also said they were fond of outdoor sports. They added they would want room in the house for formal entertaining (up to 12 people) and informal parties of 25 to 35 people.

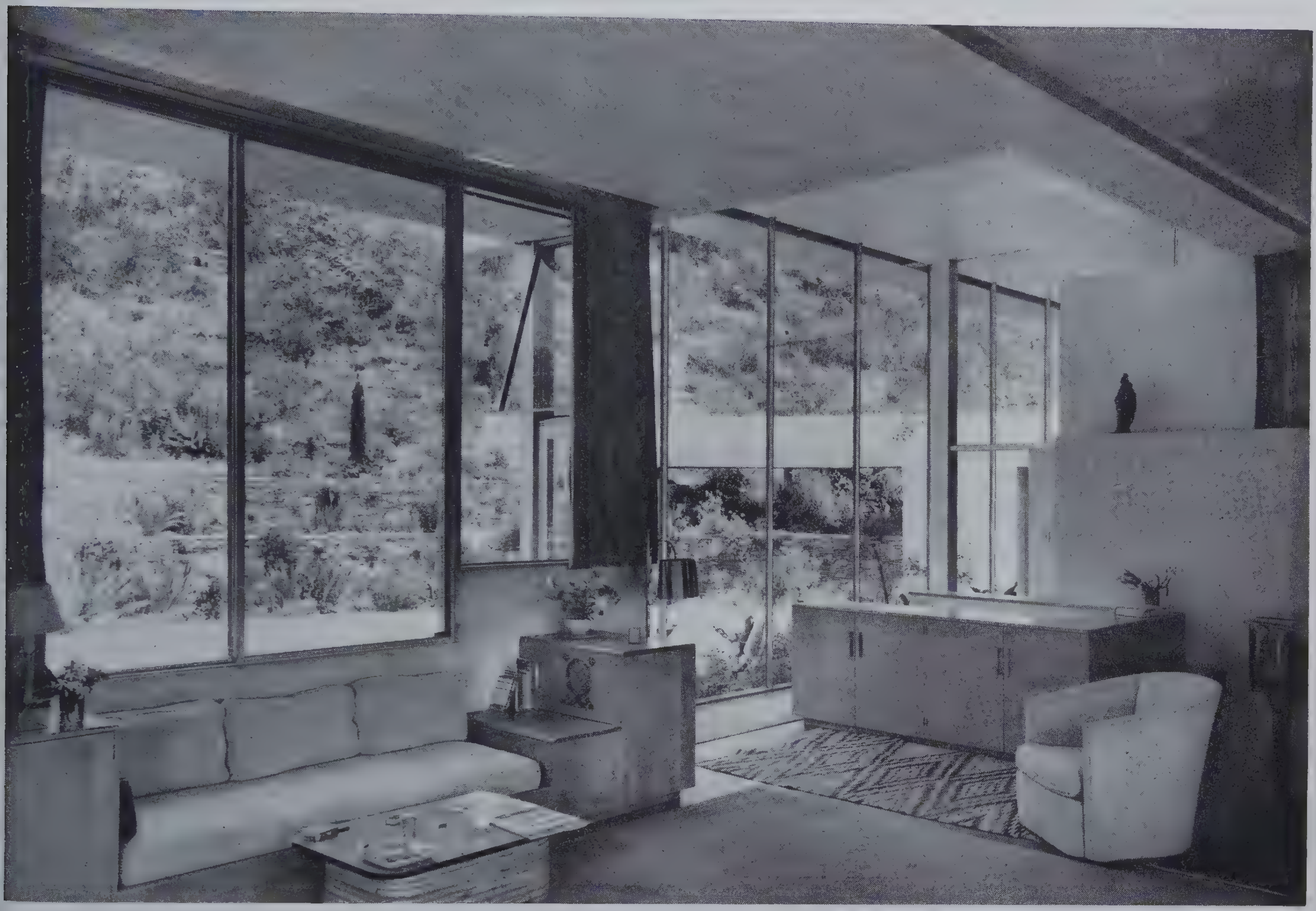
Dislikes were small dark closets, *any* rooms so dark that lights would be needed in daytime, picture moldings, radiators of any kind, central overhead lighting in the dining room, bathroom basin hardware that spots when wet, heating pipes that creak, doors that won't latch, rats, and drafts!

It was agreed that the house must contain a hall with coat closet, living room, dining room, library or study, kitchen and pantry, laundry, back and front stairs, playroom in the basement, ample storage space and garage in the basement, master bedroom, four other bedrooms, and maid's room, all with ample closets, and with three bathrooms. A two-story house with a basement was expected, though not required. Mrs. Hitch offered more detailed specifications for closet and pantry space, as well as a list of furnishings already in her possession for the principal rooms.

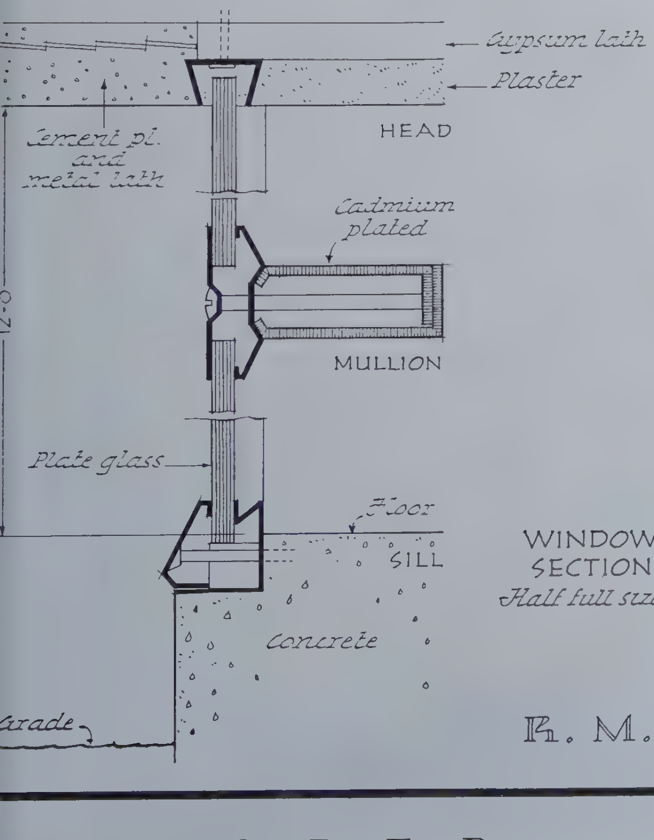
Confining the area to two levels, as pictured here, Raymond gave the clients larger rooms than they had expected, segregated the guest room, united the service portions with the garage, and made the "basement playroom" important by establishing an intimate relation with the family sleeping rooms. Both library and study were provided, the maid's room could be used for two, an extra bath was provided, and one of the principal features of the upper floor is the large terrace, a feature that the clients had wanted but had not expected within the budget.

There are refinements in plan and details that are typical of Raymond's deftness and his thoughtful planning. For instance, the roof was designed with a continuous ridge line and eave line, though the house is shaped to the hillside site. At the same time, the eaves project most on the south side, less on the east and west, and least of all on the north. This projection is such that the winter sun will fill and warm the rooms, all of which open to the south, but the eaves will shade the windows of the main floor in summer when the sun is higher.

THE PLAYROOM DOWNSTAIRS IS BUILT AROUND THE HEARTH, WHICH IS PAVED WITH HEIRLOOM TILES

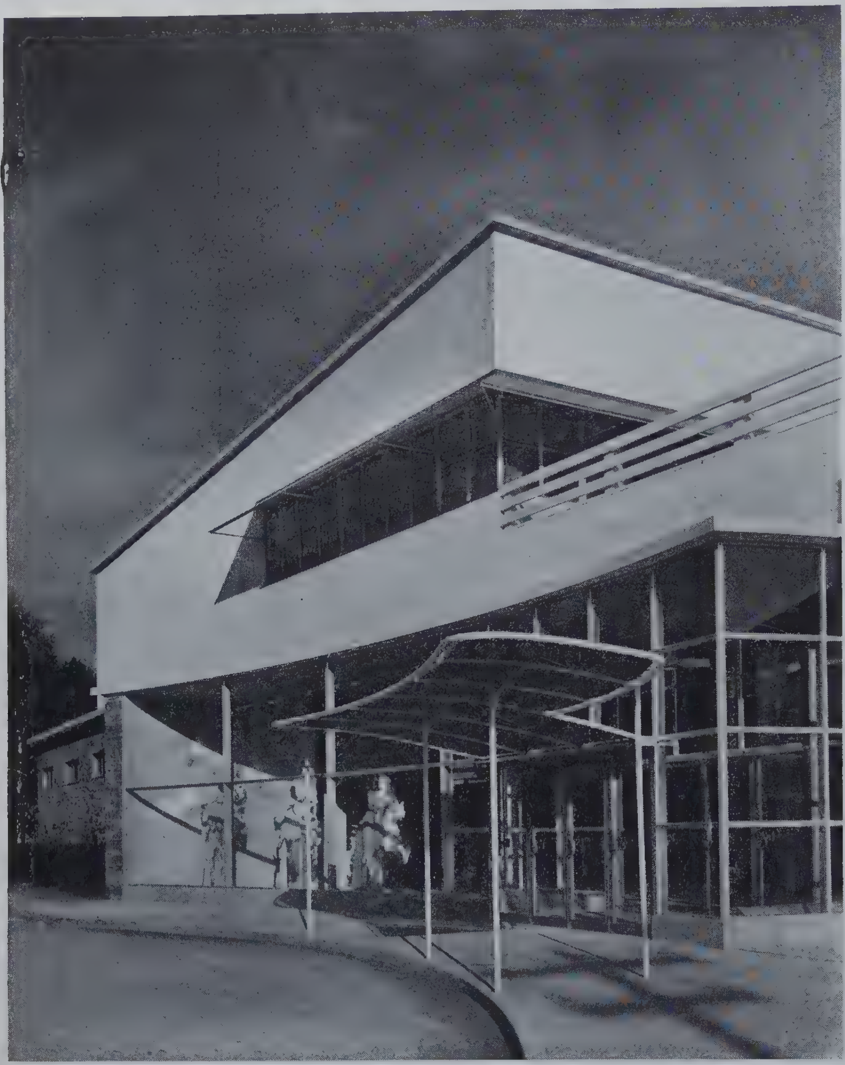


W P. WOODCOCK

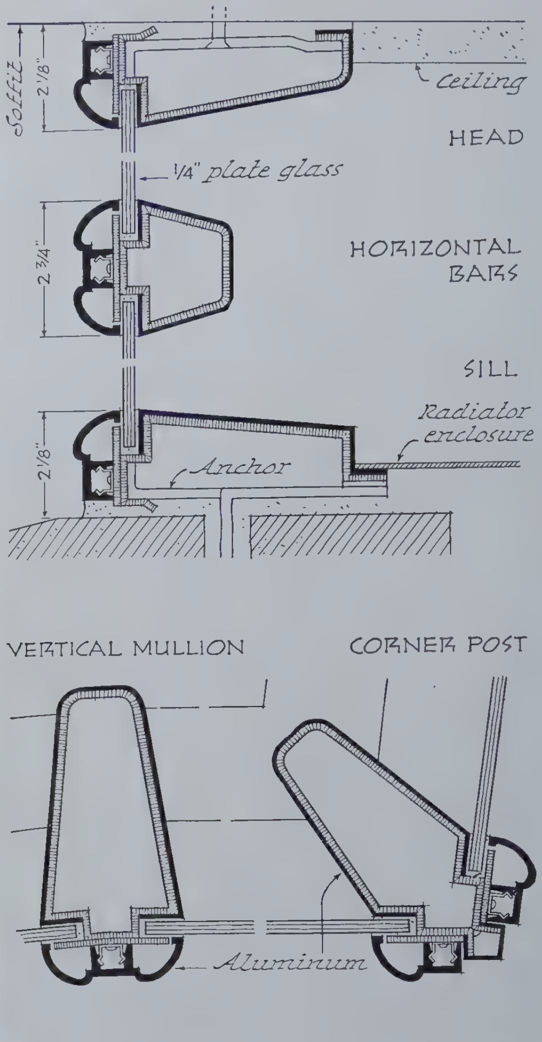


WINDOW SECTION
Half full size

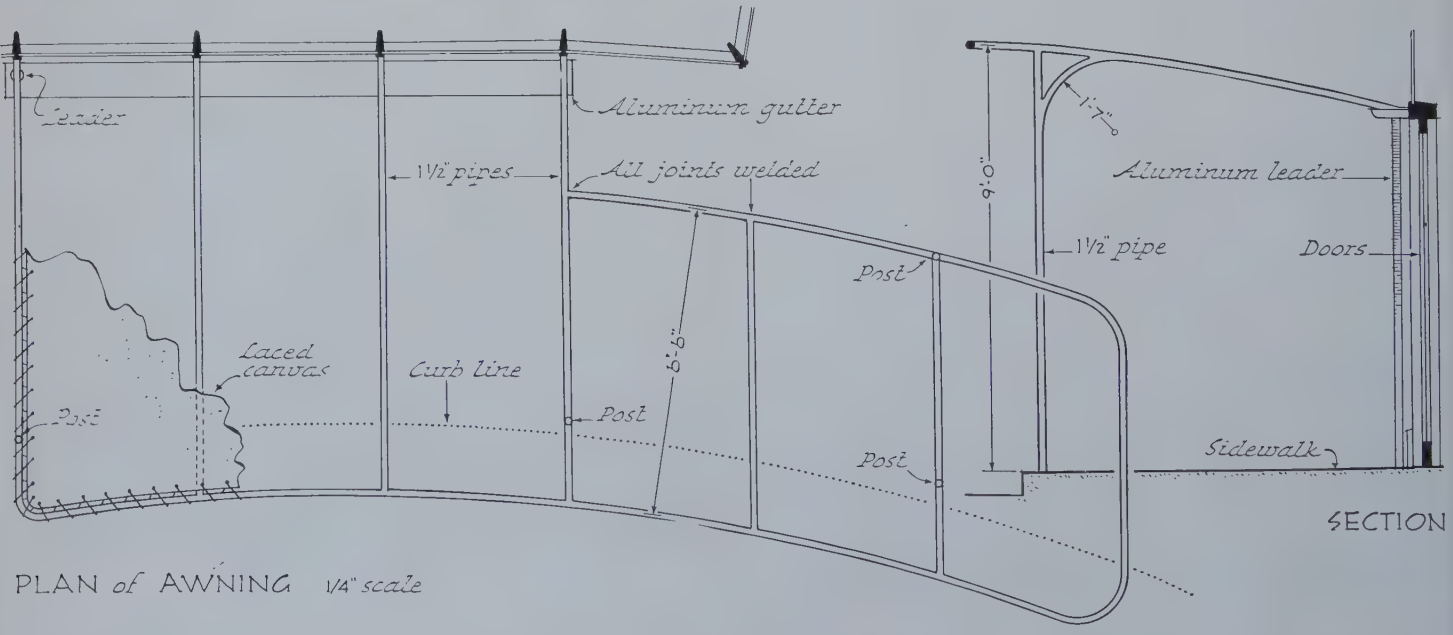
R. M. SCHINDLER . . . . . . Architect



HANS VAN NES

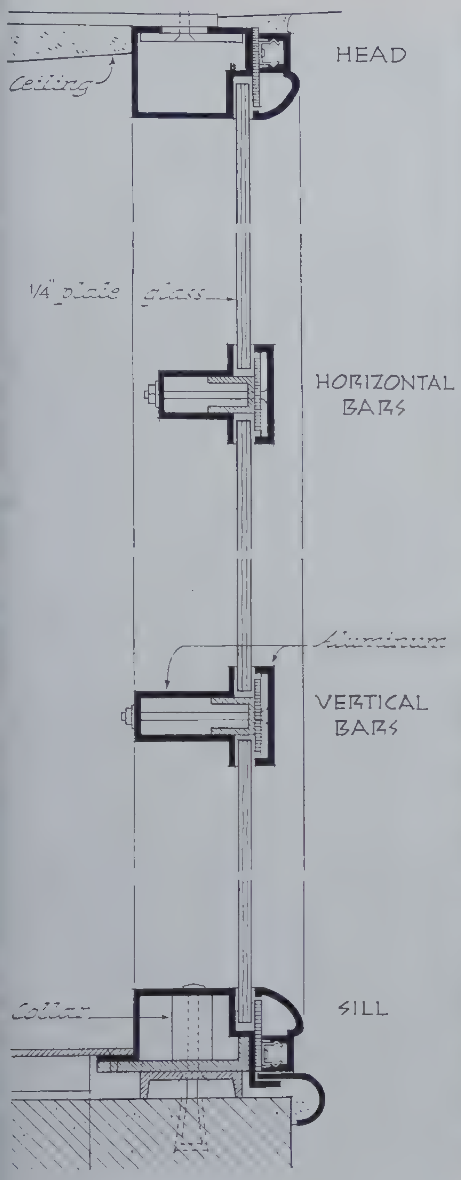


WINDOW SECTIONS 3" scale

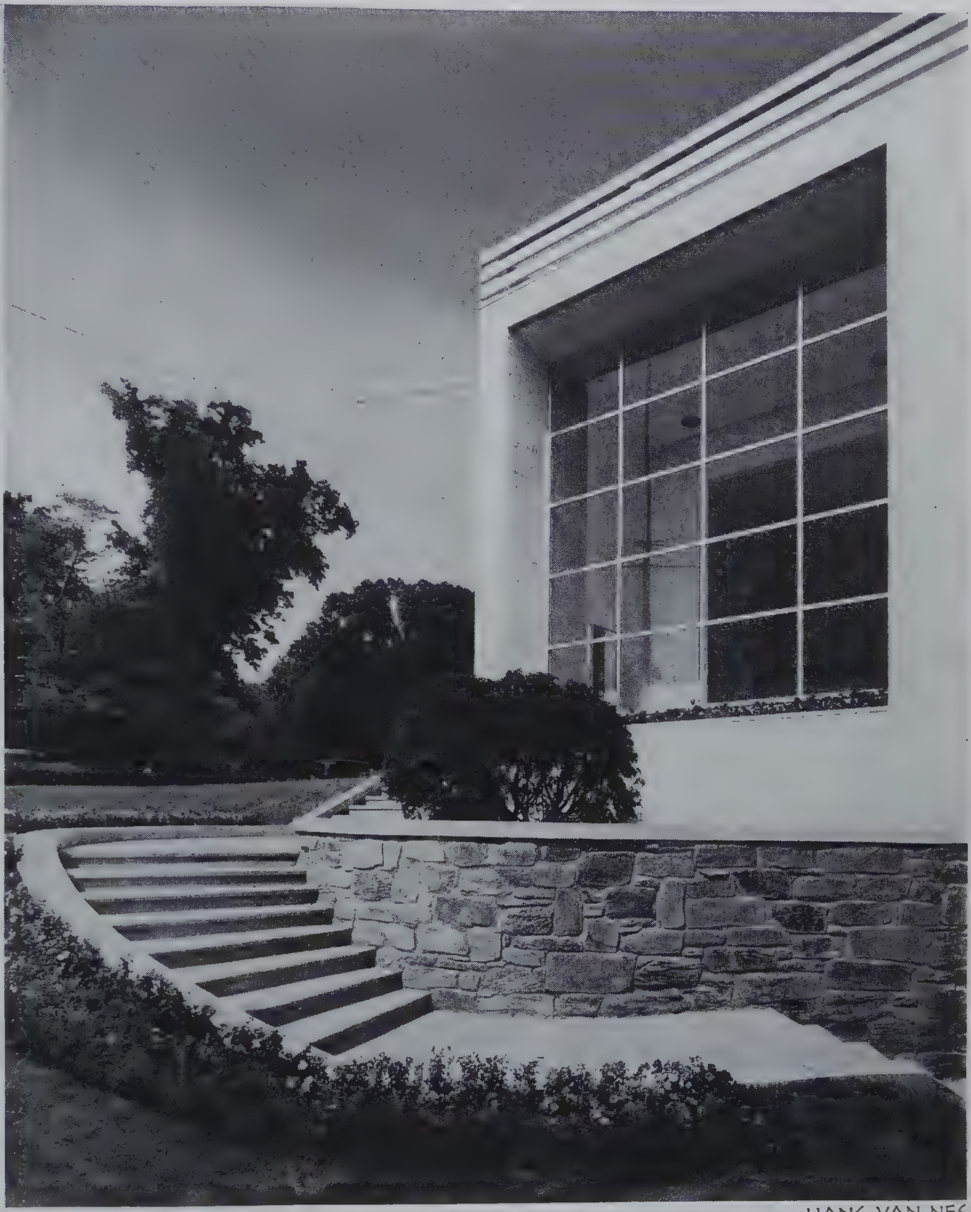


PLAN of AWNING 1/4" scale

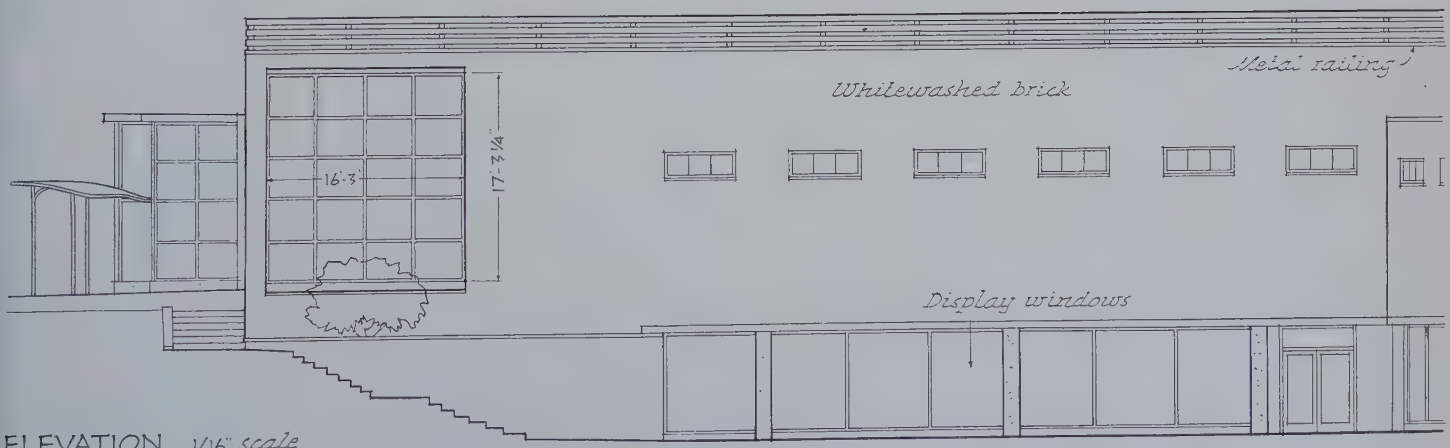
RAYMOND LOEWY, *Designer* STARRETT & VAN VLECK, *Architects*



WINDOW DETAIL 3" scale

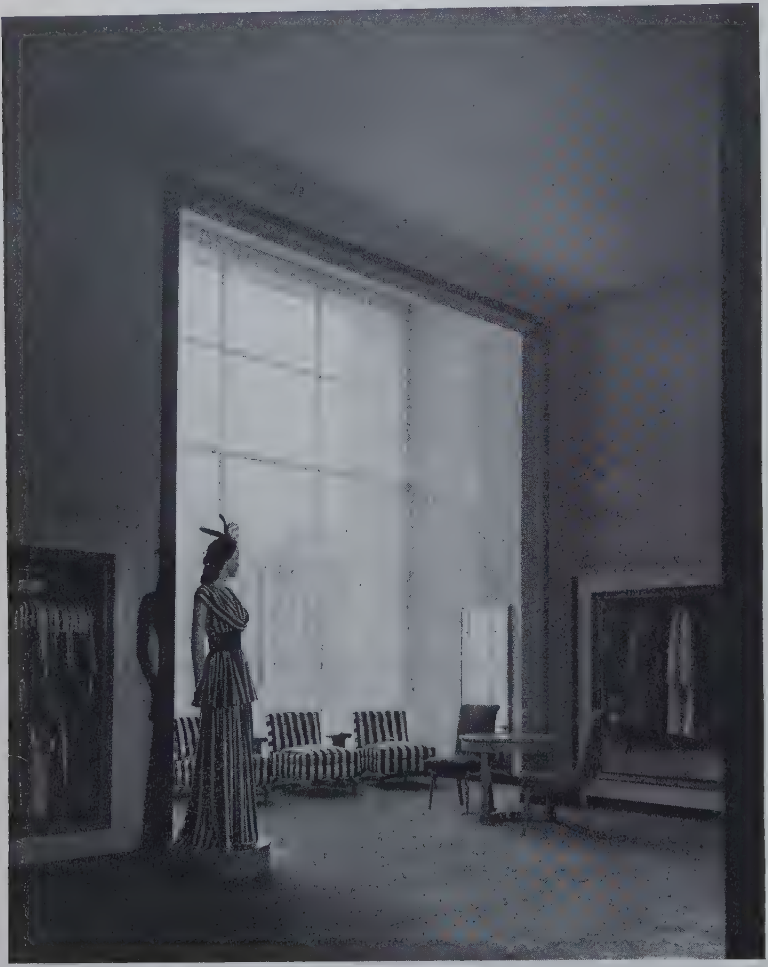


HANS VAN NES



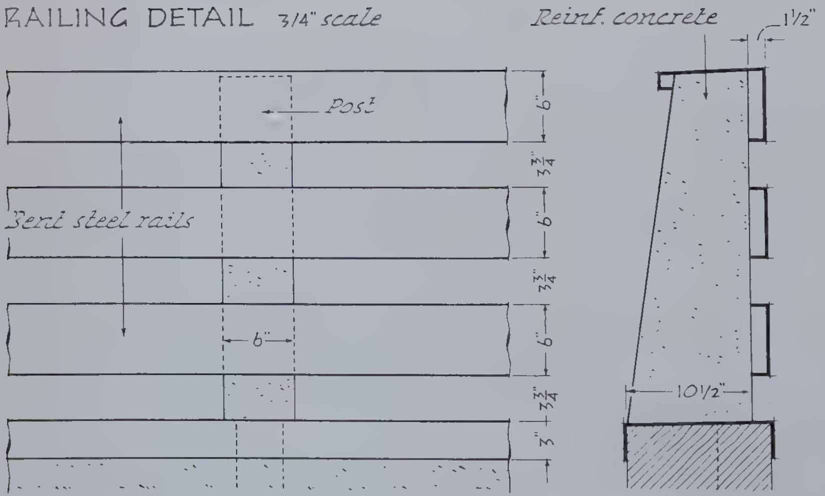
ELEVATION 1/16" scale

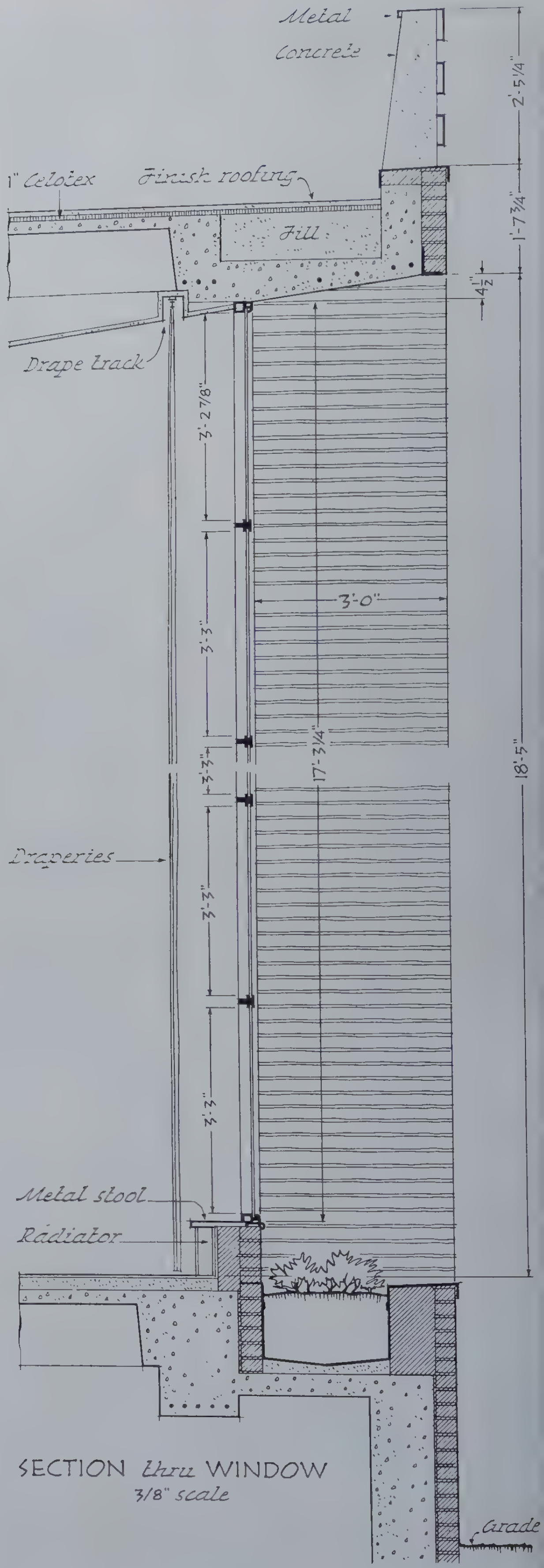
RAYMOND LOEWY, *Designer* **STARRETT & VAN VLECK**, *Architects*



HANS VAN NES

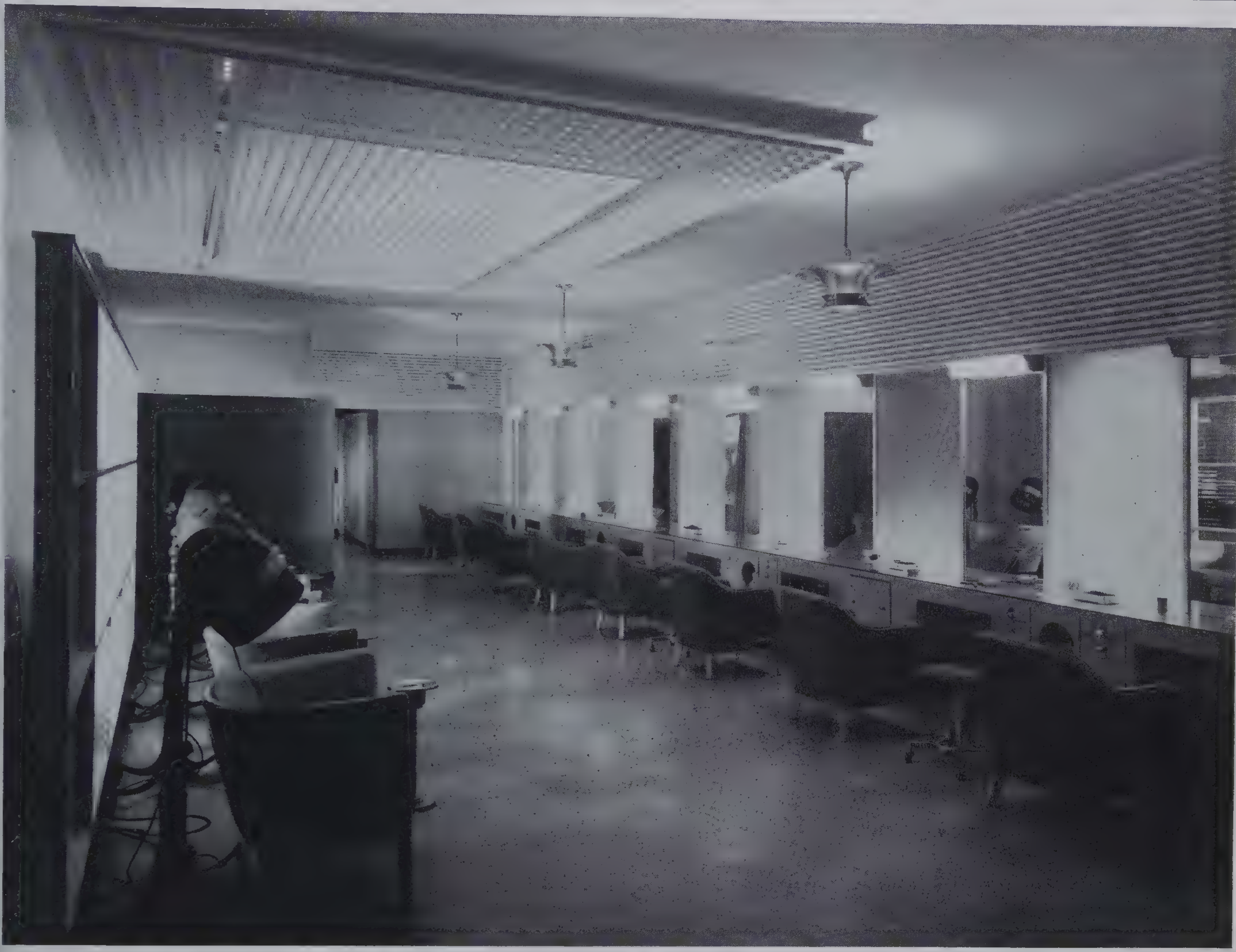
RAILING DETAIL 3/4" scale





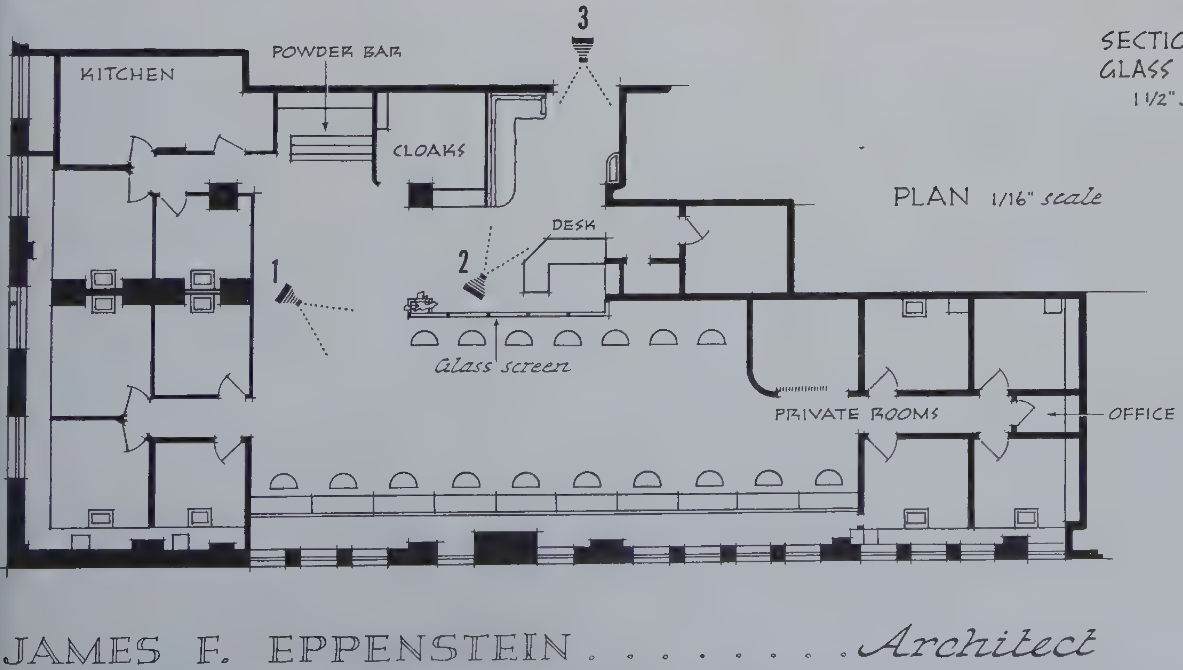
SECTION thru WINDOW
3/8" scale

RAYMOND LOEWY, *Designer* STARRETT & VAN VLECK, *Architects*

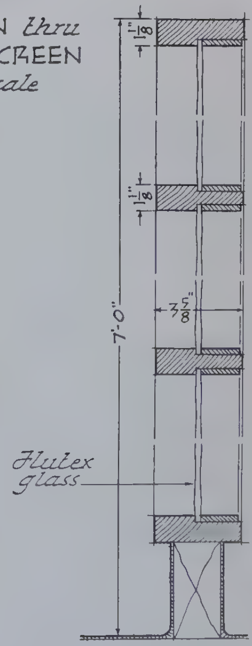


1

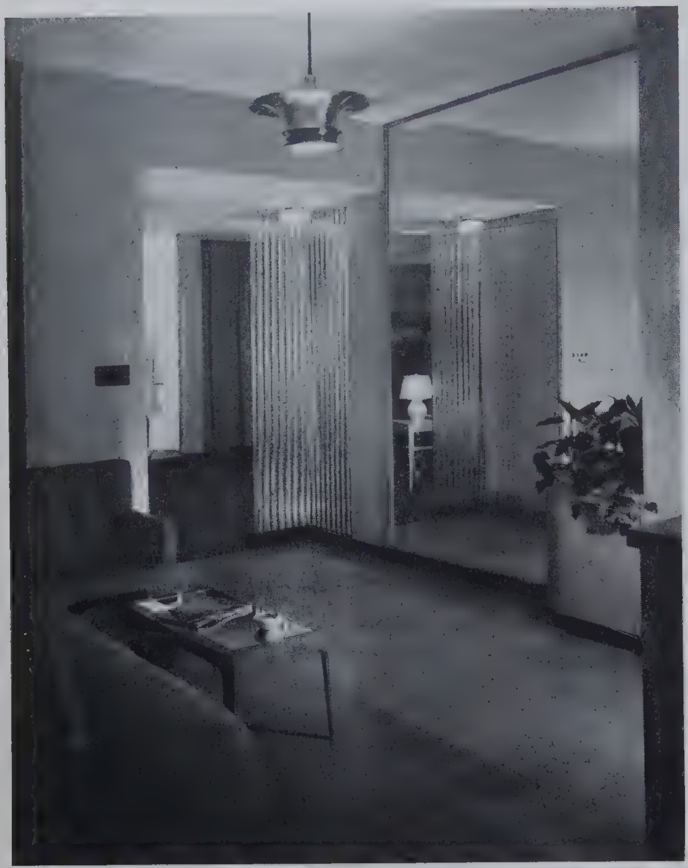
HEDRICH - BLESSING STUDIO



SECTION thru GLASS SCREEN
1 1/2" scale

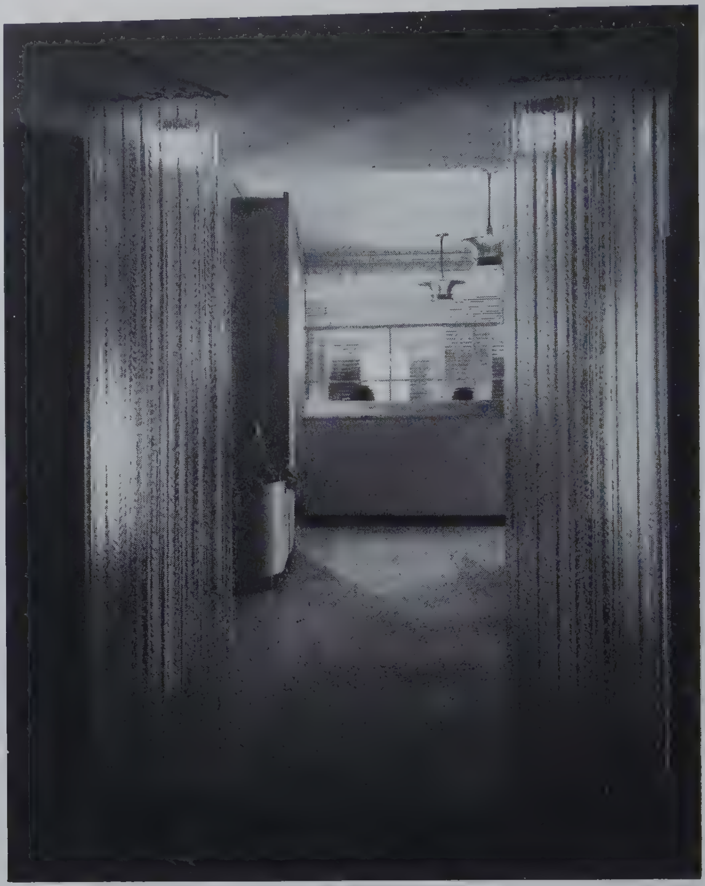


JAMES F. EPPENSTEIN . . . . Architect

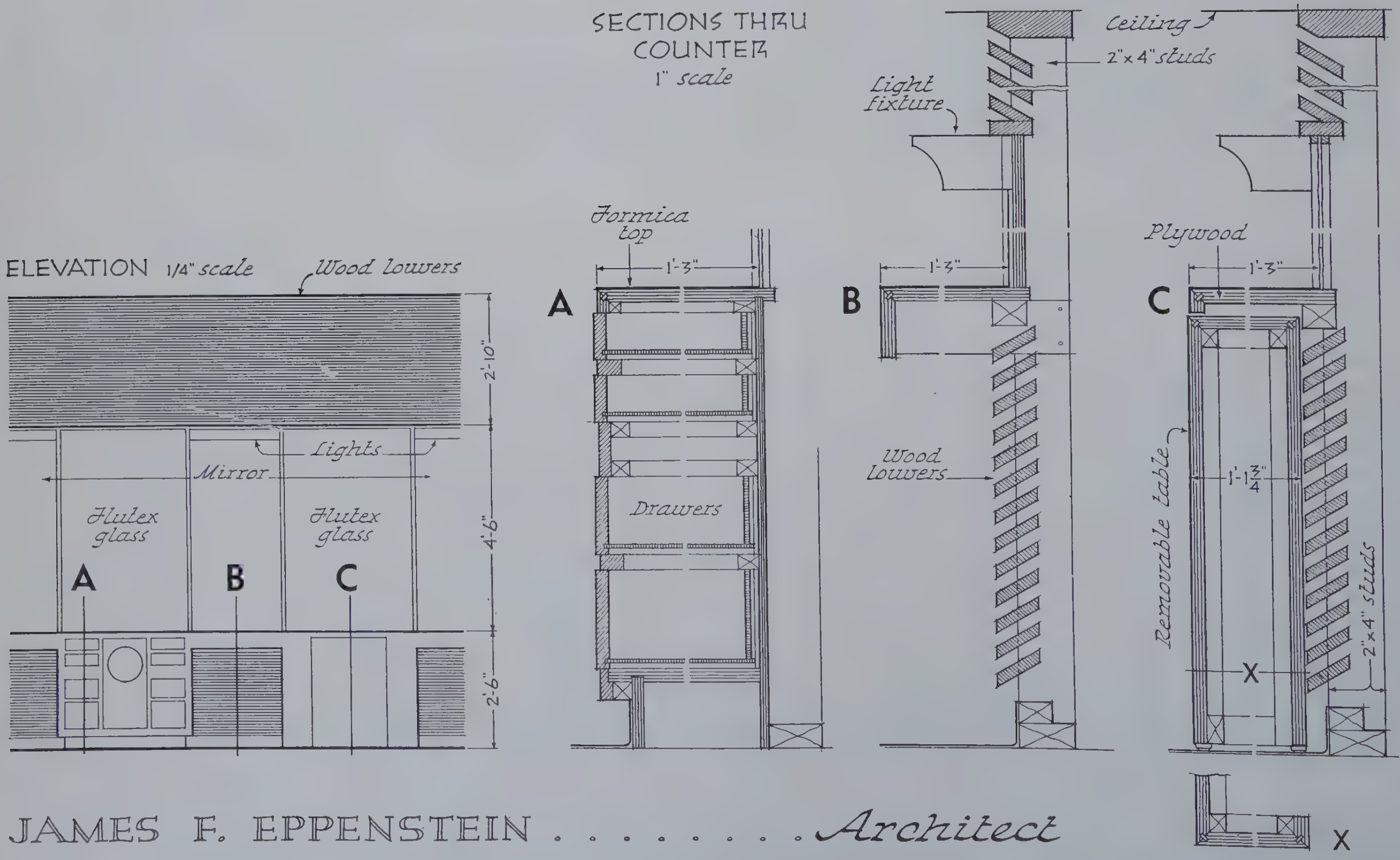


HEDRICH-BLESSING STUDIO

2



3



SECTIONS THRU COUNTER
1" scale

ELEVATION 1/4" scale

JAMES F. EPPENSTEIN . . . . *Architect*

THE FRUSTRATED MONUMENT COMPLEX

BY TALBOT F. HAMLIN

The New York City Tunnel Authority presented a challenging opportunity to the architects of the city when it held its recent competition for the Mid-River Ventilation Building of the Brooklyn-Battery tunnel. What a chance! Here was to be built a structure of considerable bulk and height at the very front door of New York, off the north end of Governor's Island. Here was a building to serve a necessary and practical use (certainly not a use to be ashamed of), a building which at the same time would form an important element in the view from Battery Park, from Governor's Island, or for anyone coming down the East River on a boat or passing by the lower end of Manhattan Island. No finer site for an important and exciting piece of architecture could be imagined.

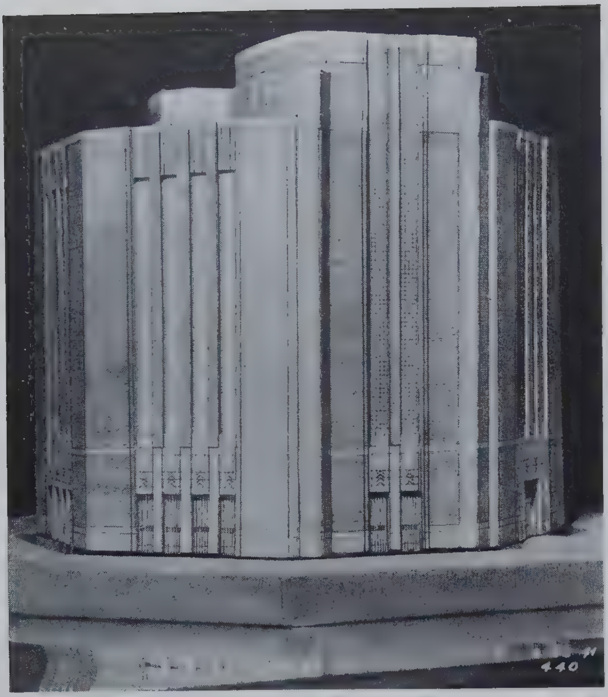
And the program was a model of program writing, short, definite, and to the point. Nevertheless, as one studies the program a doubt creeps in. It is not a design for a building for which the Authority is searching; it is merely a façade. Everything else is determined, every structural column set, every piece of mechanical equipment, every duct put in a definite place which must be preserved. Here is no opportunity for a great creative three-dimensional imagination to take a need and transform it into significant form. Instead there is merely the opportunity to take basic forms and sizes already determined and drape around them an exterior surface.

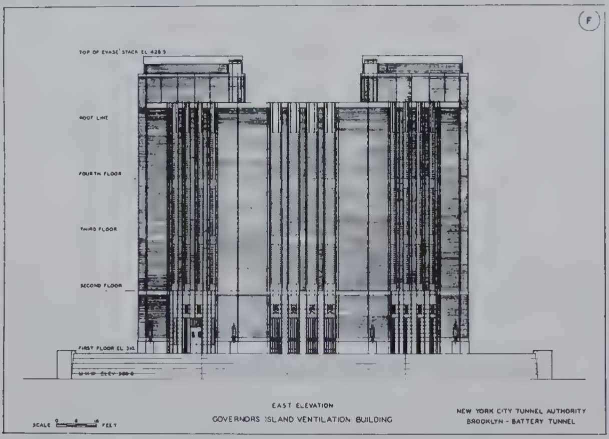
Further study reveals a second basic difficulty in the way of real architectonic creation, for in the very forms of the basic structure established by the program there is an unfortunate duality. Few forms are more regular or suggest more continuous treatment than an octagon; yet here a basic octagonal shape bears at two of its sides, opposite to each other, taller separated exhaust duct structures reaching high above any other necessary portion of the building. Now this is a fundamental architectural error. A creative mind steeped in the meaning of architectural form would realize at once that any such combination of regular octagon and two higher accented sides was a contradiction in terms impossible of any satisfactory frank solution, and would either have developed some system of equalizing the height of the structure or else have abandoned the regular octagon in favor of some plan shape more expressive of the dual height. Evidently the architects were well aware of this difficulty. There were but two possible general choices within the strict cubage limitations and the dictated forms of the program. One was to erect a parapet at the top of the octagon high enough to include the total height of the two duct stacks, thus concealing a functional form in the building for the sake of giving meaning to the octagonal plan. The other choice was to stress the higher stacks and conceal the regularity of the octagon by various systems of setbacks in plan or curves or other elements which necessarily break the scale of the total mass.

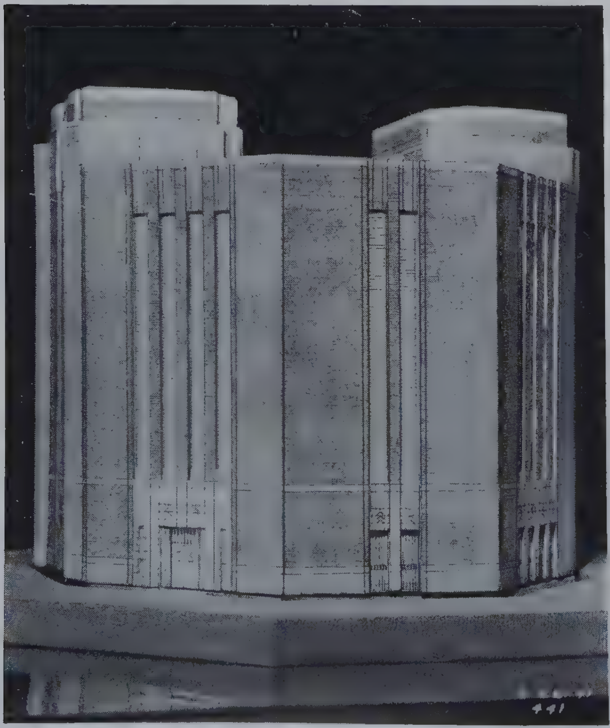
The jury evidently felt itself in the same quandary, giving the First Prize to a regular octagonal scheme with a unified skyline, and the Second Prize to one which had emphasized stacks, and intermediate corner treatments. In these two designs the qualities of the two basic *partis* are developed perhaps to their highest points. The First Prize design does everything possible to monumentalize the structure, setting its louvers between tall, deeply projecting piers with tops which apparently splay up against an interior, thinner wall, carrying its octagonal top unbroken around, and departing (we hope consciously) from any attempt to express either the basic purpose of the building or the steel structure which is its framework. One feels almost an admiration for the proud disdain of this refusal to be bound by any such mundane things as steel columns and for this desire to produce instead the likeness of a great buttressed masonry tower.

The Second Prize design, No. 37, takes absolutely the reverse attitude. Here is the clear geometry of steel, the simple brick faces framing corners of louvered metal in prismatic shapes. Here below on the first floor are steel and glass windows in continuous bands to flood light into the lower working floors, and large doors to admit machinery. There is in the junction of the octagon shape below the louvers and the prismatic shape above possibly a certain awkwardness, but it is the awkwardness of geometrical intersection only and not of any ill-thought-out artificial expedients. I only wonder why the walls at the east and west sides are channeled whereas those to the north and south are unbroken, for the channeling is not deep enough to produce from any distance strongly marked light and shade and, for me, the channels destroy the geometric quality the rest of the building so eminently possesses. And with all the possibilities in facing materials available why were these surfaces 120 feet and more high and 50 feet wide made of brick? Stone or marble, treated of course as facing and not as structure, or terra cotta in large slabs might have had the quality of monumentality needed. Nevertheless, in its clear composition, in its simple expression of a steel-constructed building, in its frank avowal of its purpose through its prismatic louvered sides, this design of all those premiated seems to this reviewer by far the most distinguished.

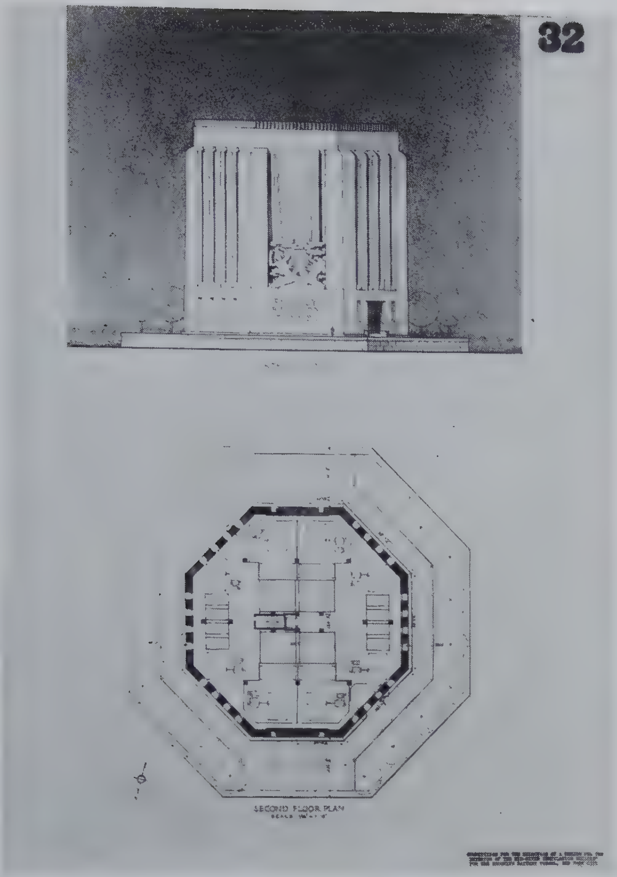
Some of the other designs seem to ape office building or skyscraper types of twenty years ago with little, if any, advance evident over many of the designs submitted in the Chicago Tribune competition. They are skyscrapers, but skyscrapers reduced to miniature scale, as though the

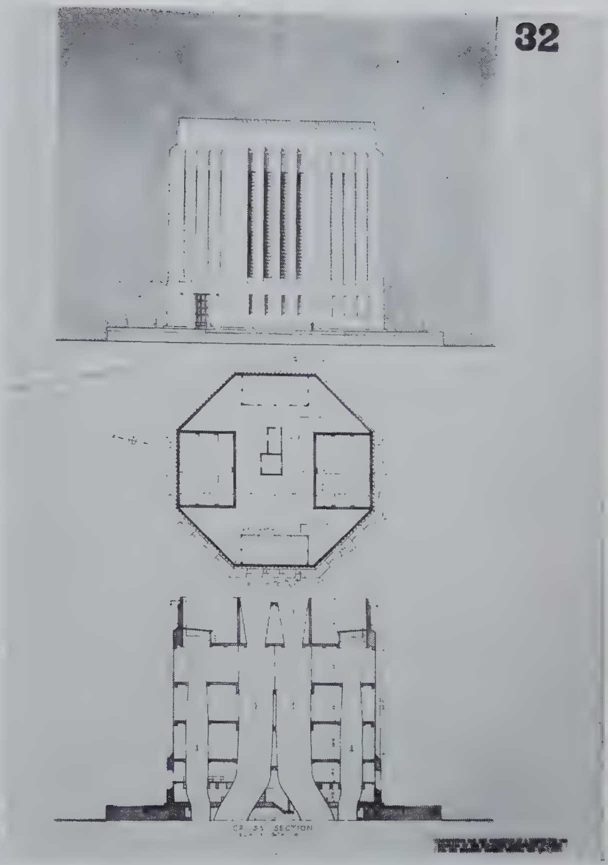



F
TOP OF EVASE' STACK EL 428.5
ROOF LINE
FOURTH FLOOR
THIRD FLOOR
SECOND FLOOR
FIRST FLOOR EL 310
EAST ELEVATION
GOVERNORS ISLAND VENTILATION BUILDING
NEW YORK CITY TUNNEL AUTHORITY
BROOKLYN - BATTERY TUNNEL
SCALE 0 8 16 FEET

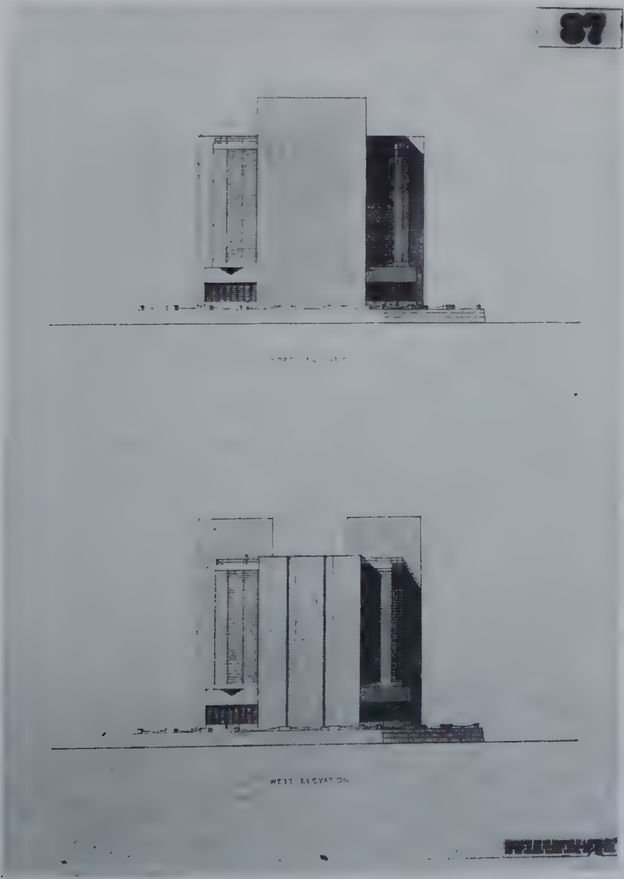


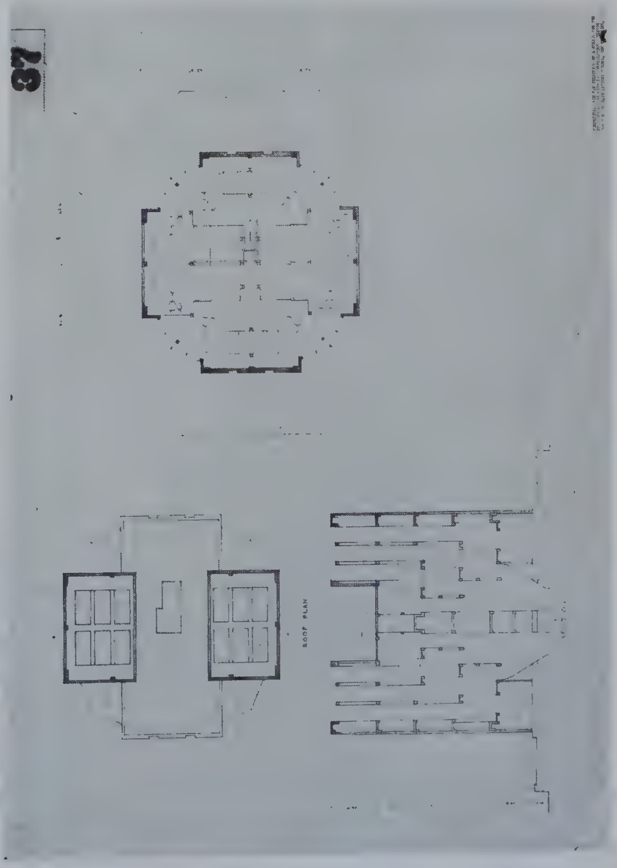
THE BRICK-AND-GLASS VENTILATION BUILDING DESIGNED BY THE TUNNEL AUTHORITY, PRIOR TO THE COMPETITION HELD AT THE INSTANCE OF THE FINE ARTS FEDERATION (HEADED BY JAMES C. MACKENZIE) IS SHOWN (LEFT) IN AN ELEVATION AND TWO PHOTOGRAPHS OF A STUDY MODEL, FILED WITH THE CITY ART COMMISSION TO RECORD THE DESIGN

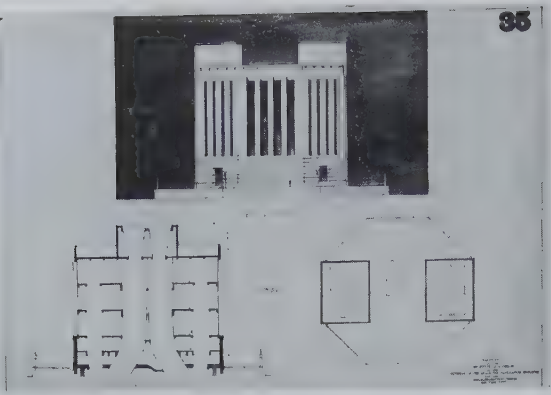




NO. 32—FIRST PRIZE DESIGN ($2,000) IS BY MC KIM, MEAD & WHITE. NO. 37—SECOND PRIZE DESIGN ($1,000) IS BY ARCHIBALD MANNING BROWN. BOTH WERE AMONG THE SEVEN INVITED COMPETITORS. THE OTHERS WERE NOT PREMIATED BY JURORS PAUL PHILIPPE CRET, GEORGE MC ANENY, JAMES H. DUGAN, ROBERT KORNACHER, AND ERIC GUGLER, CHAIRMAN. THE TUNNEL AUTHORITY, CONSCIOUS OF THE PROMINENCE OF THIS BUILDING IN NEW YORK HARBOR, OBTAINED RFC FUNDS FOR A COMPETITION (APPROVED BY A.I.A.) FOR THE EXTERIOR DESIGN



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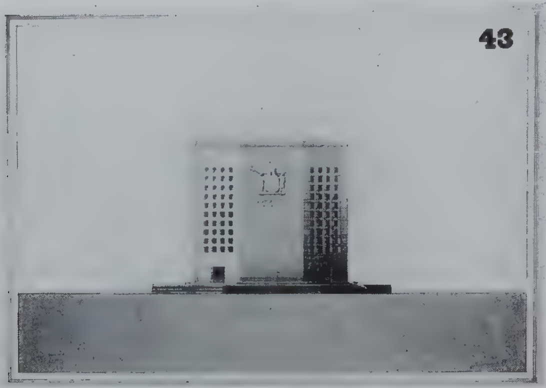
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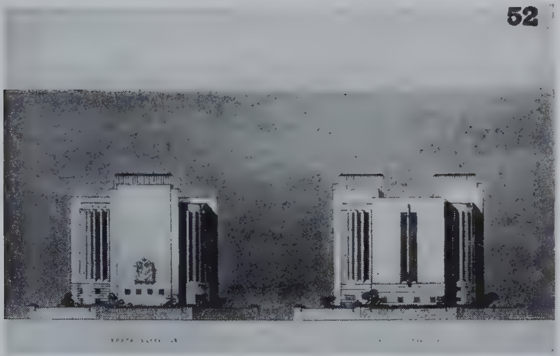
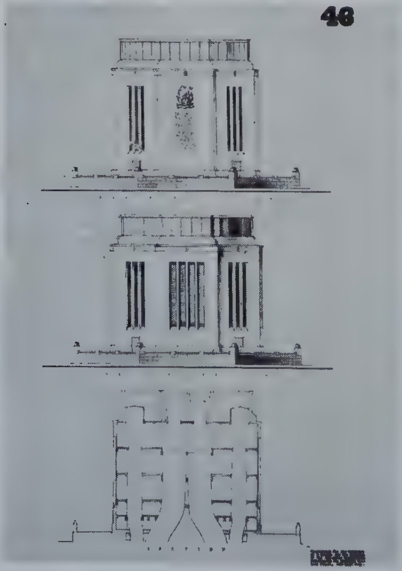

52

designers were dazed by the whole problem of scale. This is not to say there were not other more imaginative, more exciting designs among the fifty-seven submitted. I have seen only those to which the jury saw fit to award prizes or mentions.

Let us not forget that the design was actually for a façade to be hung on a dictated structural steel framework built for the purpose of ventilation. Listen to the jury report analyzing the First Prize design: "The depth of the reveals where openings for ventilation are required had an important effect upon its decision. *These deep reveals make angle views seem solid* and they add to the interest in light and shade. *The building does not cry out with the suggestion that it is merely for the removal of bad air.* . . . Recommendation is made that the sculpture be restudied and *the piers be somewhat deepened.*" (The italics are mine.) Of the Second Prize the jury says, "A straightforward solution of the problem, *accentuating the function of the structure;* economical to build and of good mass and outline." (Italics mine.)

What more can one say? Is ventilation a shameful function? Are deep reveals the answer to a steel-framed structure? Or is steel framing itself somehow, again, a shameful thing to be concealed or lied about? Can it be that the jury felt that the whole underlying building system was a mistake and that the structure should have been designed from the beginning as a solid masonry monumental tower? Can it be that all the attempts of forward-look-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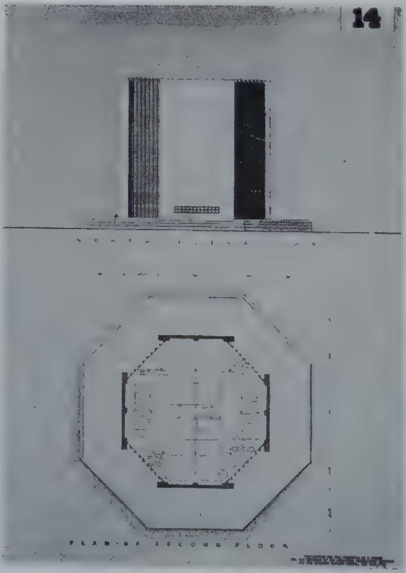
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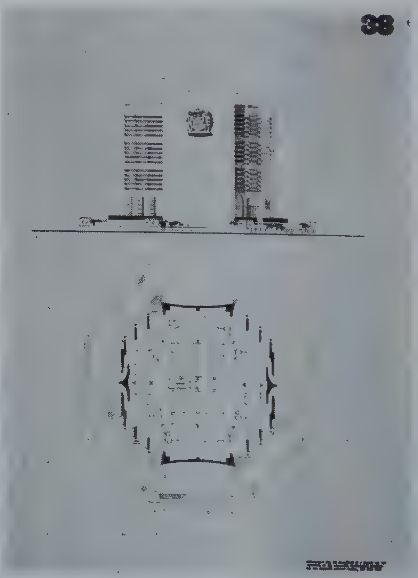
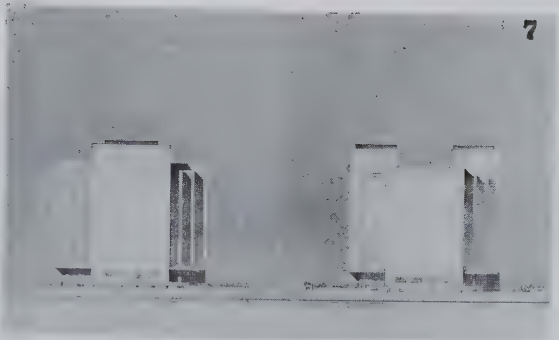

38

NO. 35—THIRD PRIZE DESIGN ($750) IS BY CLINTON & RUSSELL. THE DESIGNS RECEIVING HONORARY MENTION WERE: NO. 43, BY ALFRED MORTON GITHENS AND FRANCIS KEALLY, NO. 52 BY BLOCH & HESSE, NO. 46 BY ELDREDGE SNYDER, NO 14 BY WILLIAM J. CREIGHTON WITH SALVATORE GRILLO, ASSOCIATE, AND NO. 38 BY MC CAFFERY & GAUTHIER. PRIZEWINNING DRAWINGS WERE RETAINED BY TUNNEL AUTHORITY ing architects, critics, and teachers to instill the idea that architectural form must, to be valid, flow naturally from function and structure have gone for naught?

Why should a distinguished jury state as its reasons for its first award those very qualities in which the design contradicts the building's function and structure? This is a question much deeper and more important than the decision of this single competition. I think the answer is to be found in what I can only call the "frustrated monument complex" which runs deeply through the subconscious minds of architects and lay people alike. We *should* be building monuments, expending money and effort on structures built for themselves alone, either to satisfy our aesthetic sense, to memorialize great ideas and people, or to express our civic and national pride. Monuments such as these should be solid and sculptural. Yet we rarely have the opportunity to design such buildings, and our frustration in this desire leads us astray again and again into an attempt to contradict essential architectural integrity by trying to make monuments of utilitarian structures. Only a false monumentality, a contradiction of all the qualities which seem to me to make for good architecture, can result. Utilitarian buildings may be monumental in the true sense of the word, like the best of the T.V.A. structures, but such true monumentality can only come from the complete acceptance of functional demands and structural systems and their expression in the most forthright manner; it can never come from the attempt to confuse the issues. We should be proud of our great tunnels, proud of their necessary functions, proud that we have the means of ventilating them. We should be proud of our command of structural steel, eager to assert its qualities and to create that special kind of beauty which may result from its geometric perfection. Yet against the frustrated monument complex of the jury any attempt to express this pride, any attempt to build a beautiful structure which should be in its very essentials a ventilating building with a structural steel framework, was hamstrung at the outset. The program made impossible any radical form imagination; the frustrated monument complex apparently kept any integrated frank solution of the problem from sympathetic consideration. With this double hurdle can we wonder that the final result is imitative, superficial, play-acting?

7



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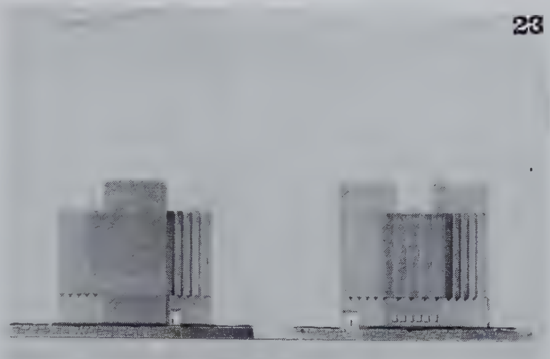

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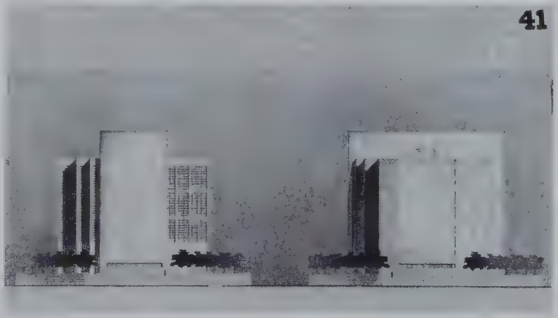

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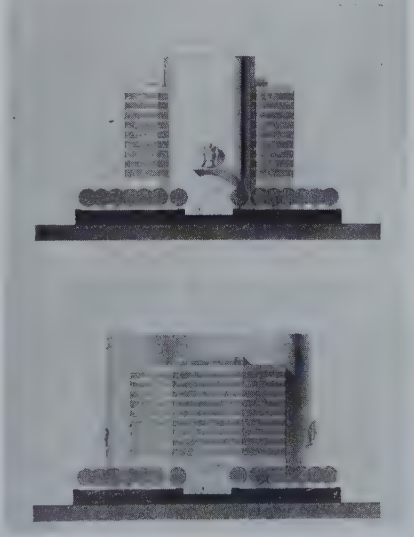


AMONG NON-PREMIATED DRAWINGS SHOWN AT THE ARCHITECTURAL LEAGUE: NO. 7, MARTYN N. WEINSTEIN; NO. 23, DON HATCH; NO. 41, WILLIAM LESCAZE; NO. 15, ELY JACQUES KAHN, PRESENT CREATIVE SOLUTIONS

A REPLY

The manuscript of my September article, "A.R.P. and Our Office of Civilian Defense," was sent by PENCIL POINTS for comment in Washington. The comments received from James P. Kirby, O.C.D. Information Officer, were forwarded to the author. While PENCIL POINTS was able to make corrections in designation and reference pointed out by Mr. Kirby, time and distance prevented the publication of any reply on the other points raised before this date.

I was very interested to read the comments on my article made by Mr. Kirby of the Office of Civilian Defense. I am grateful for his correction of errors in designation and in certain other particulars for which I apologize.

Mr. Kirby makes certain points which I think require an answer. He says, *First,* that I "set up a sharp dividing line between Protection and Voluntary Participation, when in reality the two are rather closely connected." That was not my intention. On the contrary, as I have endeavored to make clear throughout all my writings on the subject of Civilian Defense I see any tasks in connection with this as organically inter-related. Any sharp division which may appear implied in my analysis is partly due to the very incomplete description of the structure of the O.C.D. which I had to refer to as it appeared in the press and partly due to the dissection of this structure which seemed necessary for the purpose of a particular set of specialists, in this case the readers of PENCIL POINTS, as a preliminary in trying to arrive at some idea of the form that their contribution might take within this framework. Such a dissection was merely what I believed to be a reasonable, analytical device and was not intended as an arbitrary interpretation of the O.C.D. program.

Second, Mr. Kirby says that I assume "that the O.C.D. is going into the question of air raid protection in a very complete manner and evidently anticipates that it will be carried to a point where this office would be responsible for determining types and standards in material and allocation of manufacturers to produce same. To be perfectly honest the entire matter of air raid structures occupies a very low priority in our plans. Our progress in this matter has been limited to the issuance of instructional data on air raid shelters." Mr. Kirby's interpretation appears to be due to my concentration on such things as seemed most directly connected with the purposes of the readers of PENCIL POINTS. For this reason I cited certain equipment in preference to, say, that of first aid or fire-fighting. It should not be assumed because of this that I attach a predominant importance to these items insofar as they affect the whole O.C.D. program. My principal concern was to suggest application of design capacity to such parts of the O.C.D. program where they may best be put to an immediate use. May I implement such items as I then enumerated by quoting from an article since published by the head of the O.C.D., *Mayor Fiorello H. La Guardia.* He mentions the following activities in his survey which seem to demand the participation of specialists in Planning, Design, and Construction: "reports of damage, classification of buildings, i.e., comparative safety of good buildings, rescue squads . . . organized mainly among men in the building trades, demolition squads, repair squads." The mayor continues by mentioning besides these activities special situations requiring the services of designers, i.e. mobile kitchens, the study and planning of air raid shelters, supervision of the lighting problem. He goes on to say: "enumerating these tasks so rapidly conveys no hint of the preliminary planning, the study, training and co-ordination of information involved in each division. . . ." In this particular, Mayor La Guardia's view of activities to be covered comes close to my surmise.

Third, Mr. Kirby says, "The vastness of our country precludes any uniformity in methods for the application of details for shelters (here Mr. Kirby misses all that is included by implication which might be fire-fighting, first aid equipment, etc.) nor will it be centralized under national control as it probably has been in England. . . ." On this point he appears to be contradicted by his chief in the same article, which is quoted above. Mayor La Guardia says: "Our immediate problem involves not only the training of auxiliary firemen (and here by implication may be included other A.R.P. activities) but also the procurement of emergency equipment in enormous quantities. . . .

"*. . . standard specifications have been prepared at several factories which are ready to turn out pumps and other emergency equipment . . . but there are other angles to consider. To avoid the turmoil of hundreds of separate cities bidding against each other for a multitude of individual equipment design the United States civilian defense has requested all communities to wait for:*

1. *The adaptation of standard specifications.*

2. *A national plan for the acquisition of such equipment.*"

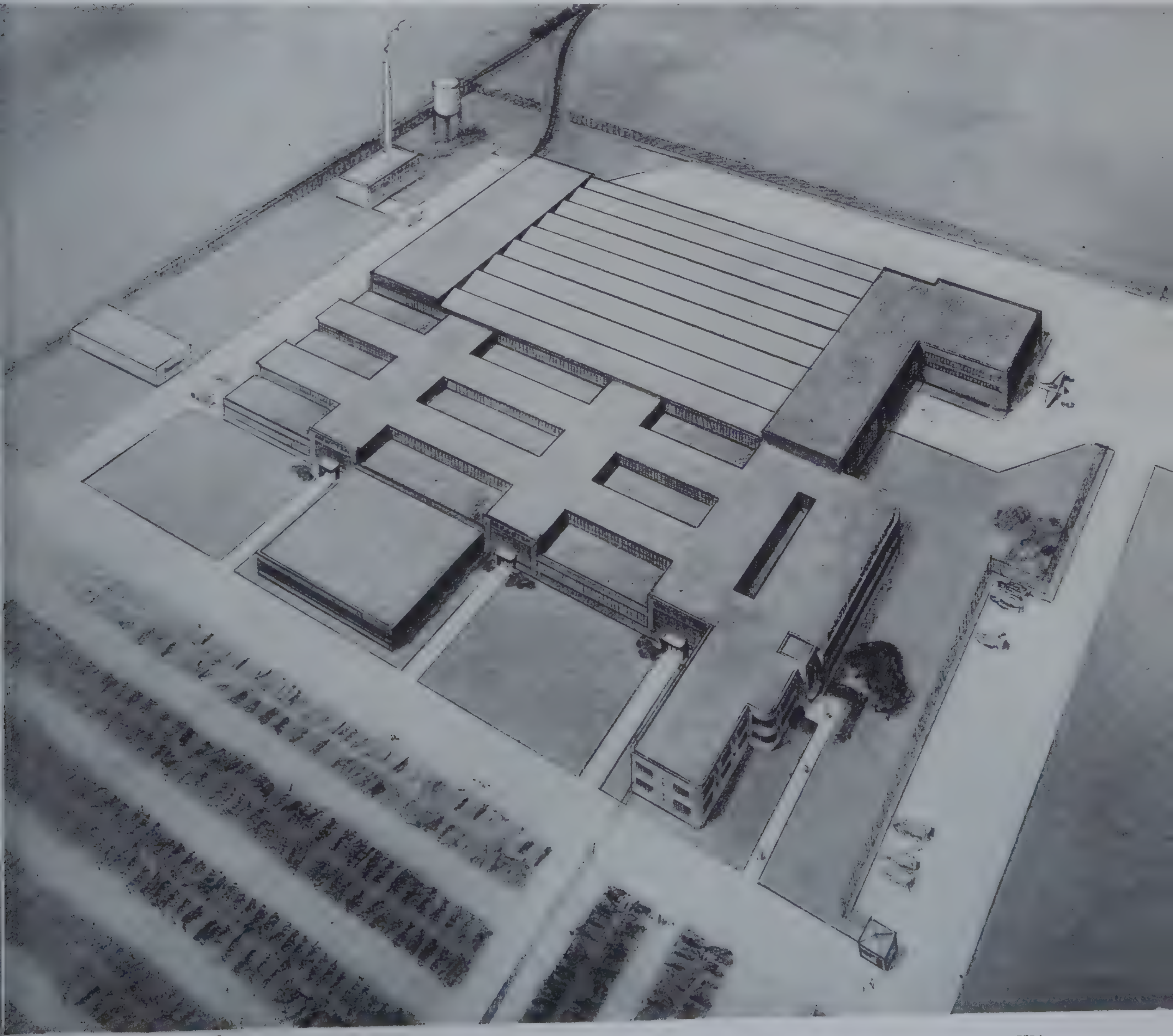
This quotation from *Mayor La Guardia* states succinctly the main theme of my article, with which Mr. Kirby finds fault, and, I feel, vindicates my assertions.

The difference in size between the United States and England, on which Mr. Kirby makes a point is, in connection with the subject matter, perhaps more a superficial distinction than a basic difference. The possibility of establishing uniform standards today surely depends on the character of industrialization. This consideration transcends the question of mere physical differences in land area. In this sense the difference between England and the United States is much reduced. Both are highly industrialized countries. The real difference lies in the fact that in the United States industrialization and mass production has been carried to a much greater point of development, and therefore the standardization advocated is made much more possible here. If one further considers the difference in the two situations established by time, it becomes apparent that the actual war experiences of Spain and England can be turned to account here while the United States is in a preparatory stage and can serve to bring relief from unnecessary wastages and strains to the citizens of the United States should they face war, which the others were not able to escape.

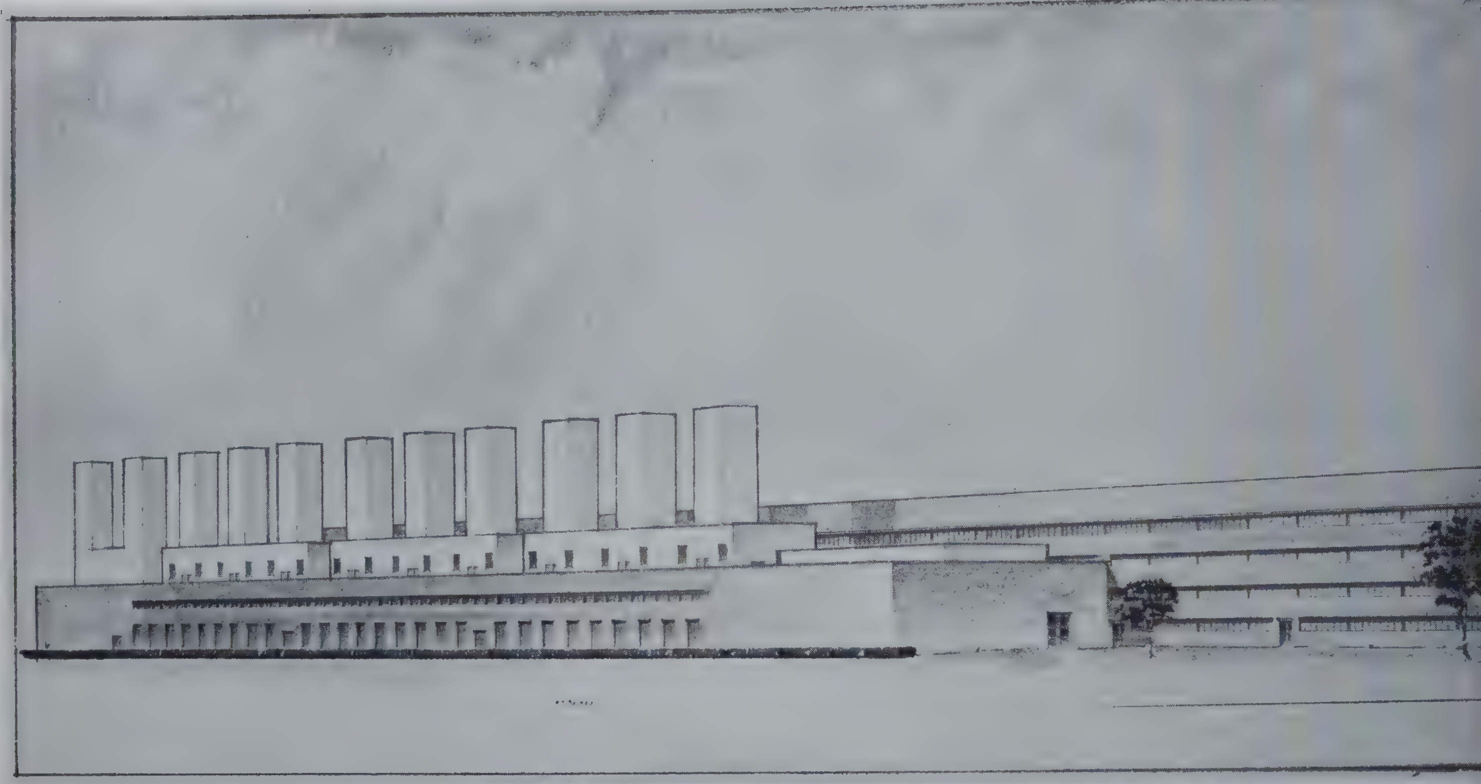
SERGE CHERMAYEFF

ARCHITECTS AND DEFENSE

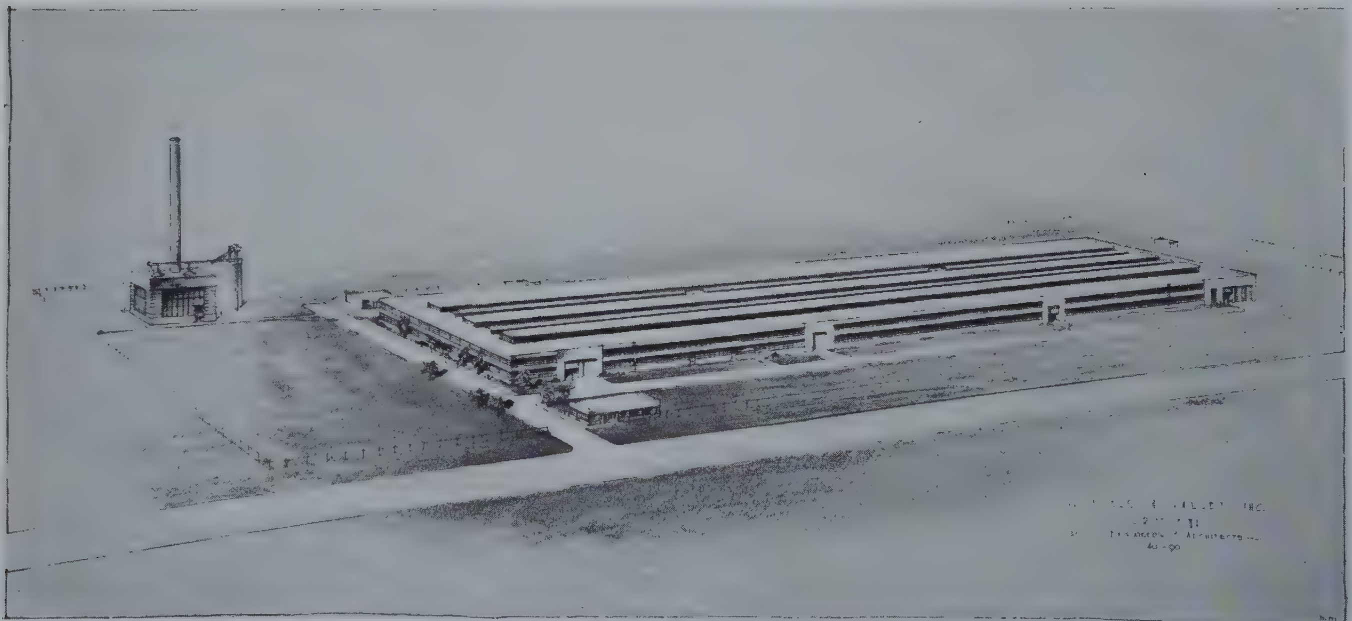
IN THE FORCED EXPANSION OF THE NATION'S INDUSTRIAL PLANT TO PROVIDE SPACE FOR MORE MEN AND MORE MACHINES TO WORK IN DEFENSE OF AMERICA, ARCHITECTS HAVE HAD A SHARE. NEW INDUSTRIAL FORMS EXPRESSIVE OF THE STEEL, GLASS, BRICK, AND FABRICATED UNITS UTILIZED IN THIS ACCELERATING PROGRAM BEGIN TO STAND FORTH. IN THIS PORTFOLIO OF DRAWINGS AND PHOTOGRAPHS THE EDITORS HAVE SOUGHT TO INDICATE SOME OF THE NEW TRENDS AS WELL AS TO REFLECT THE EVIDENCES OF THE ARCHITECTS' INFLUENCE IN A FIELD OF DESIGN THAT CAME WITHIN PURVIEW OF THE PROFESSION LESS THAN FORTY YEARS AGO. YET THIS IS A PROGRAM HARDLY BEGUN, IF WE ARE TO DECENTRALIZE AND REBUILD OUR PRINCIPAL INDUSTRIES; IF ARCHITECTS ARE TO PLAY THEIR RIGHTFUL PART IN BUILDING AMERICA



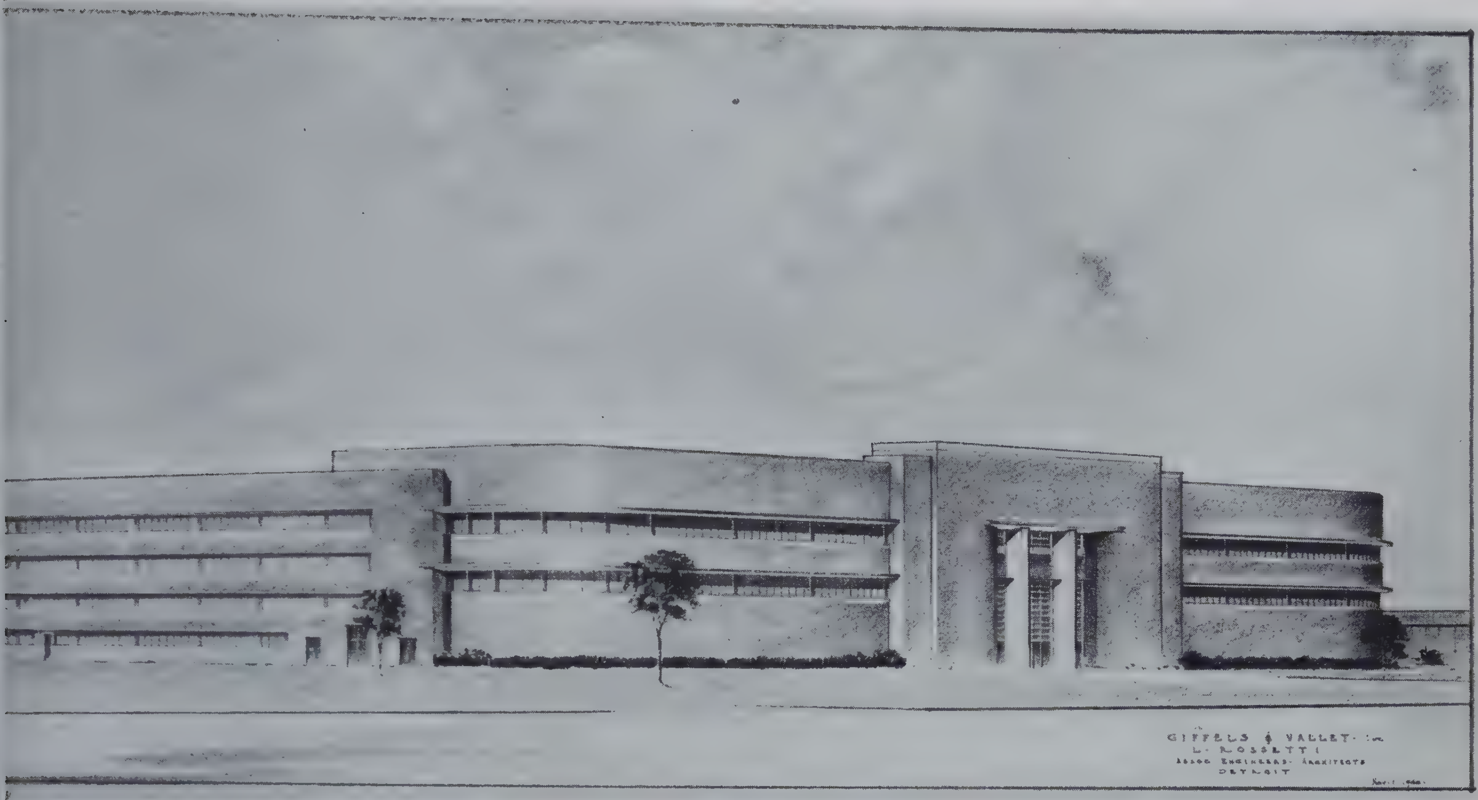
BREWSTER AERONAUTICAL PLANT, JOHNSVILLE, PA.—SILVERMAN & LEVY, ARCHITECTS, OF PHILADELPHIA



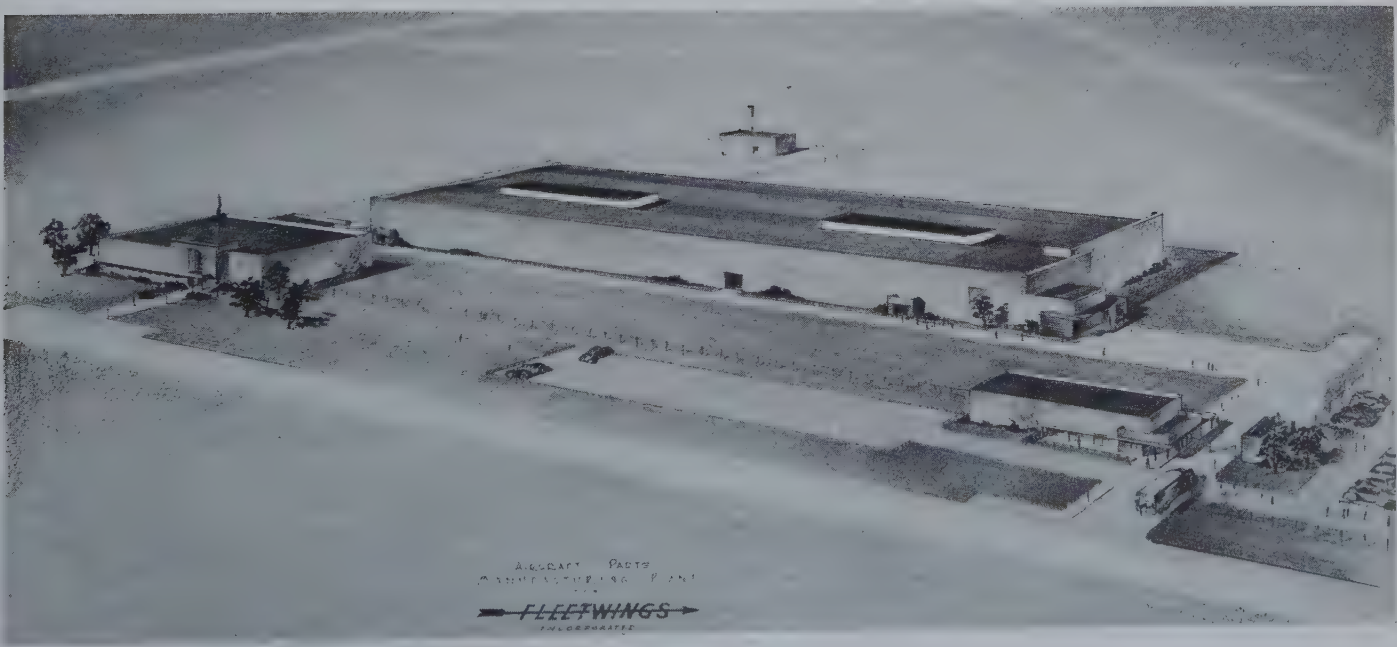
PERSPECTIVE OF THE NEW AIRCRAFT BUILDING FOR THE RIVER ROUGE PLANT OF THE FORD MOTOR COMPANY,



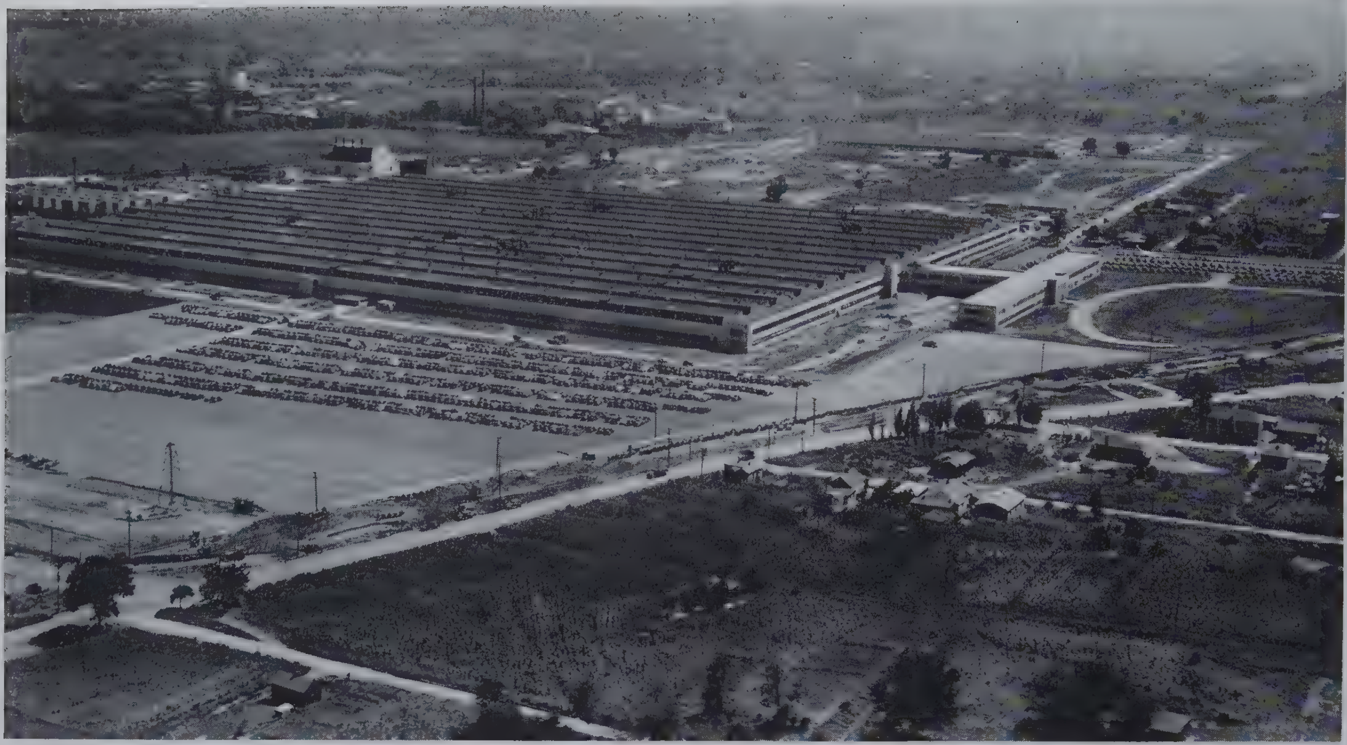
KELSEY-HAYES WHEEL CORPORATION, SMALL ARMS MANUFACTURING PLANT, PLYMOUTH, MICHIGAN, AND



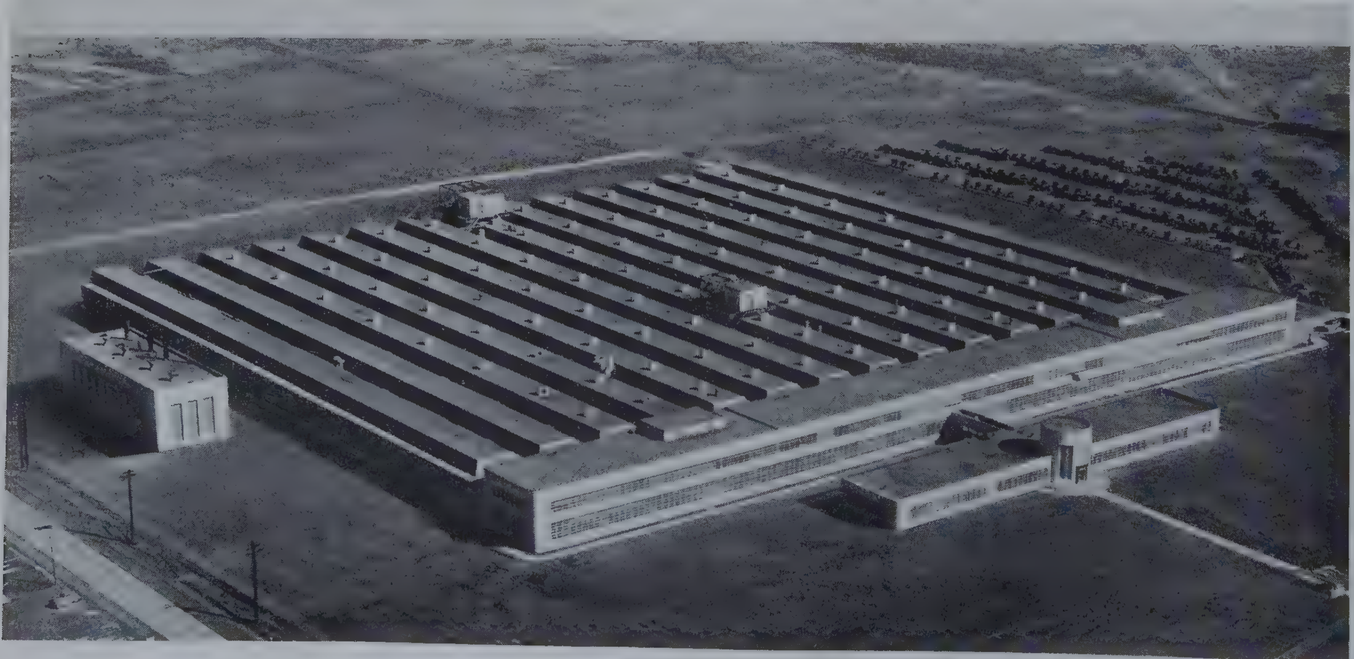
DESIGNED BY GIFFELS & VALLET, INC., L. ROSSETTI, ASSOCIATED ENGINEERS AND ARCHITECTS, OF DETROIT



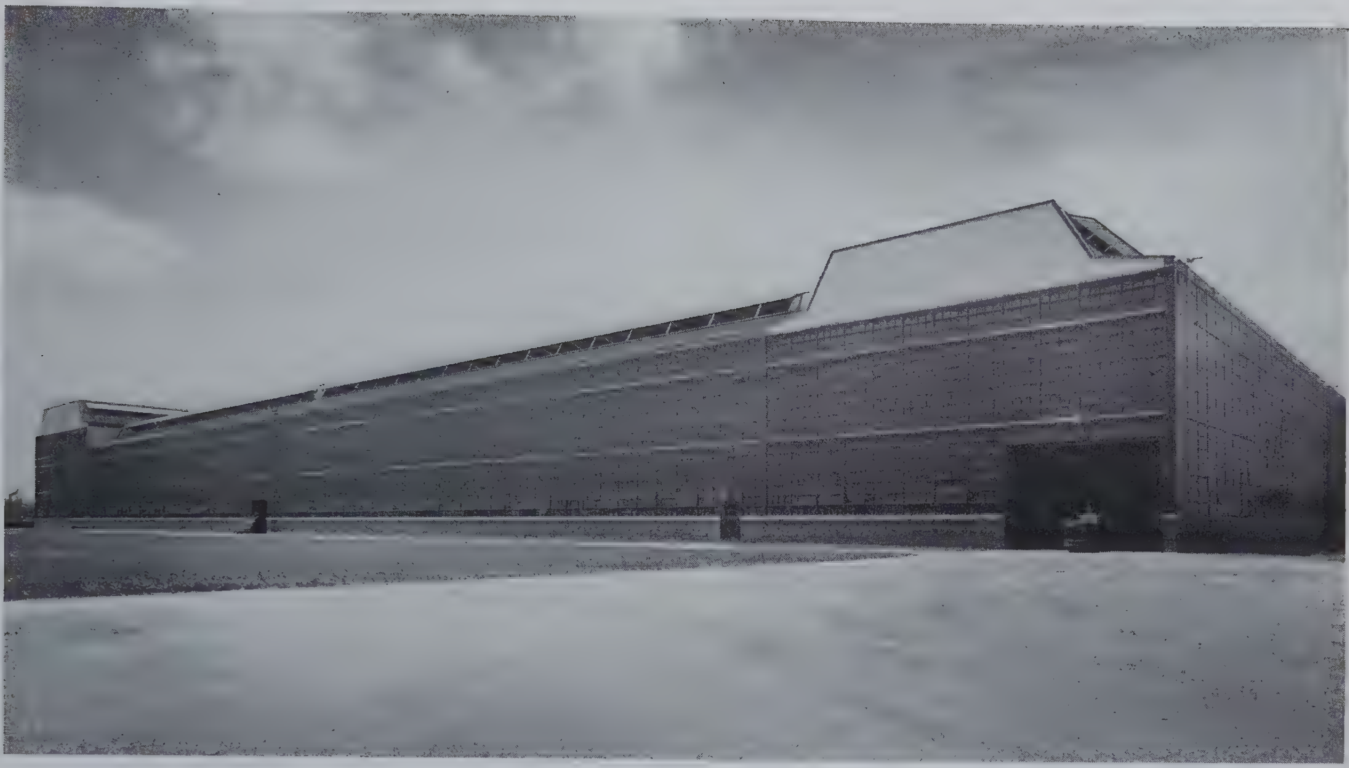
FLEETWINGS, INC., AIRPLANE PARTS MANUFACTURING PLANT, BOTH DESIGNED BY GIFFELS & VALLET, INC.



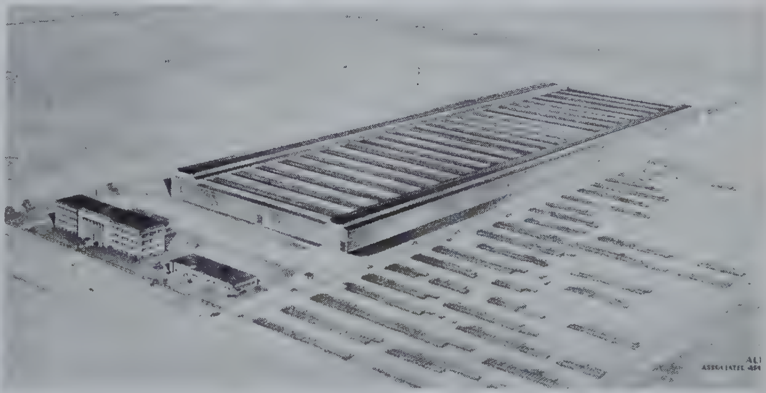
ALBERT KAHN, OF DETROIT, HAS BEEN SALUTED AS THE ARCHITECT WHO HAS CONTRIBUTED MOST TO THE CREATION OF MODERN INDUSTRIAL ARCHITECTURE. IN EXAMPLES OF HIS WORK SHOWN HERE WE CAN SEE HIS MASTERFUL ORGANIZATION; LOGICAL ASSEMBLY OF FACTORS FOR PRODUCTION. THE PLANT ABOVE HAS BEEN COMPLETED AT LOCKLAND, OHIO, FOR WRIGHT AERONAUTICAL CORPORATION. IT CONSISTS OF A 37-ACRE MACHINE SHOP (THE LARGEST ONE-STORY MANUFACTURING UNIT) WITH AIR-CONDITIONED OFFICES AT FRONT, AND FOUNDRY

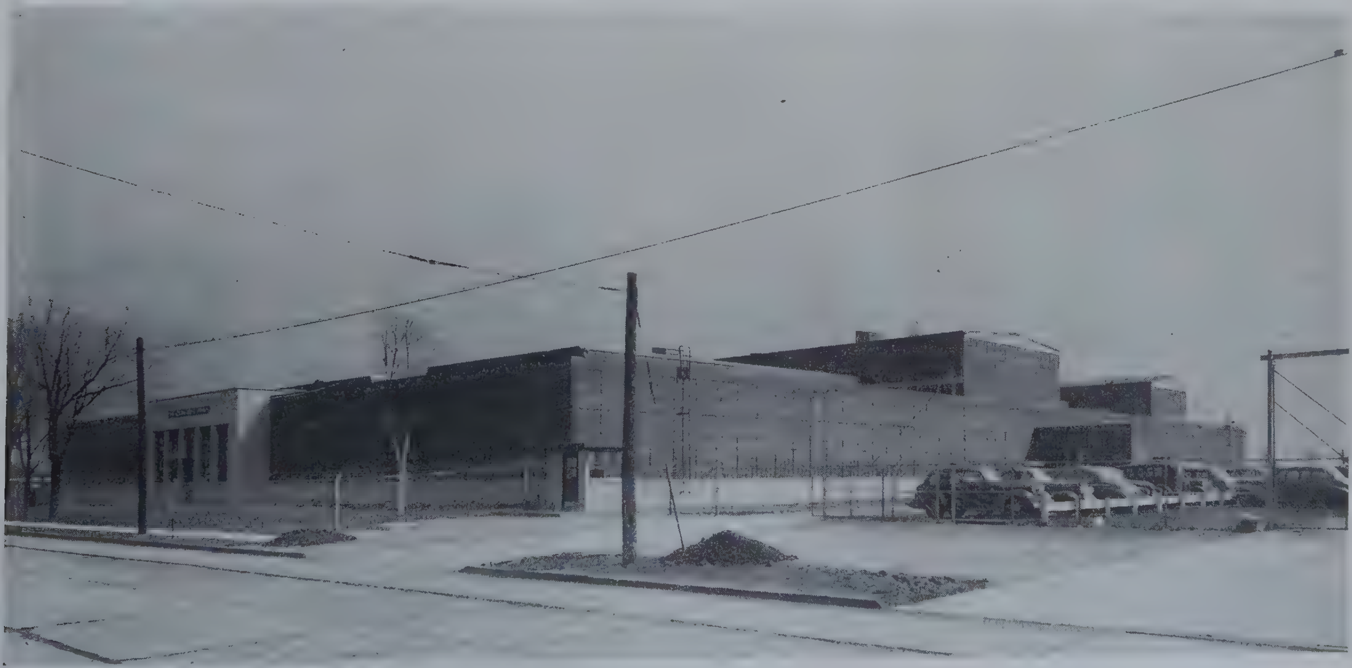


KAHN ADOPTED A SIMILAR PARTI FOR CURTISS-WRIGHT PROPELLER PLANT AT CALDWELL, NEW JERSEY

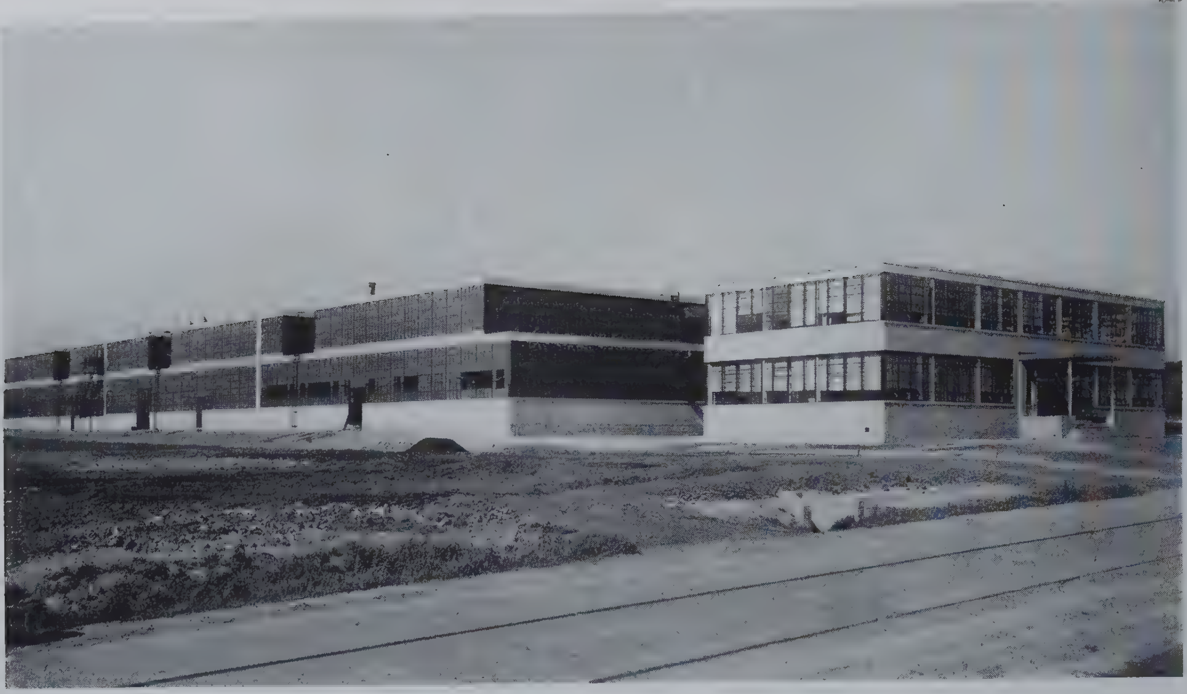


KAHN'S HANDLING OF GLASS AND STEEL IS DRAMATIC. REPRESENTATIVE OF HIS SUCCESS WITH THESE MATERIALS IS THE DETROIT TANK ARSENAL (ABOVE). THE IMMENSITY OF THE ARSENAL, 520 FEET WIDE AND MORE THAN A QUARTER-MILE LONG, IS INDICATED BY THE PHOTO, WHICH SHOWS ONLY ONE END OF THE PLANT AS PICTURED IN THE ARCHITECT'S PERSPECTIVE (RIGHT). THE BUILDING AGREES IN ARCHITECTURAL TREATMENT AND ITS LARGE SCALE WITH OTHER STRUCTURES DESIGNED BY ALBERT KAHN, INC., FOR THE EXISTING PLANT

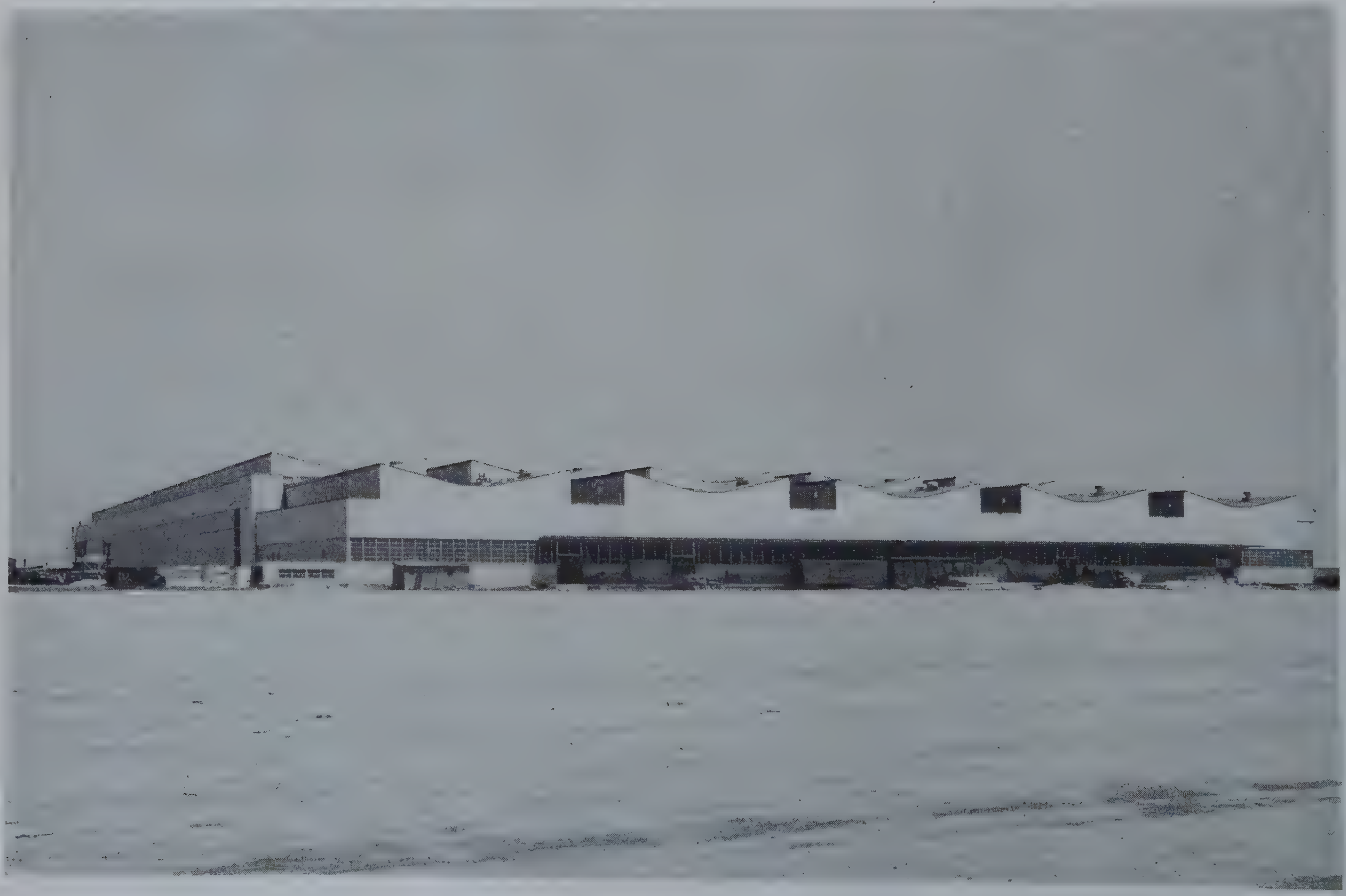




EQUALLY FRANK IN EXPRESSION IS KAHN'S PLANT FOR THE CITY MACHINE & TOOL COMPANY, TOLEDO

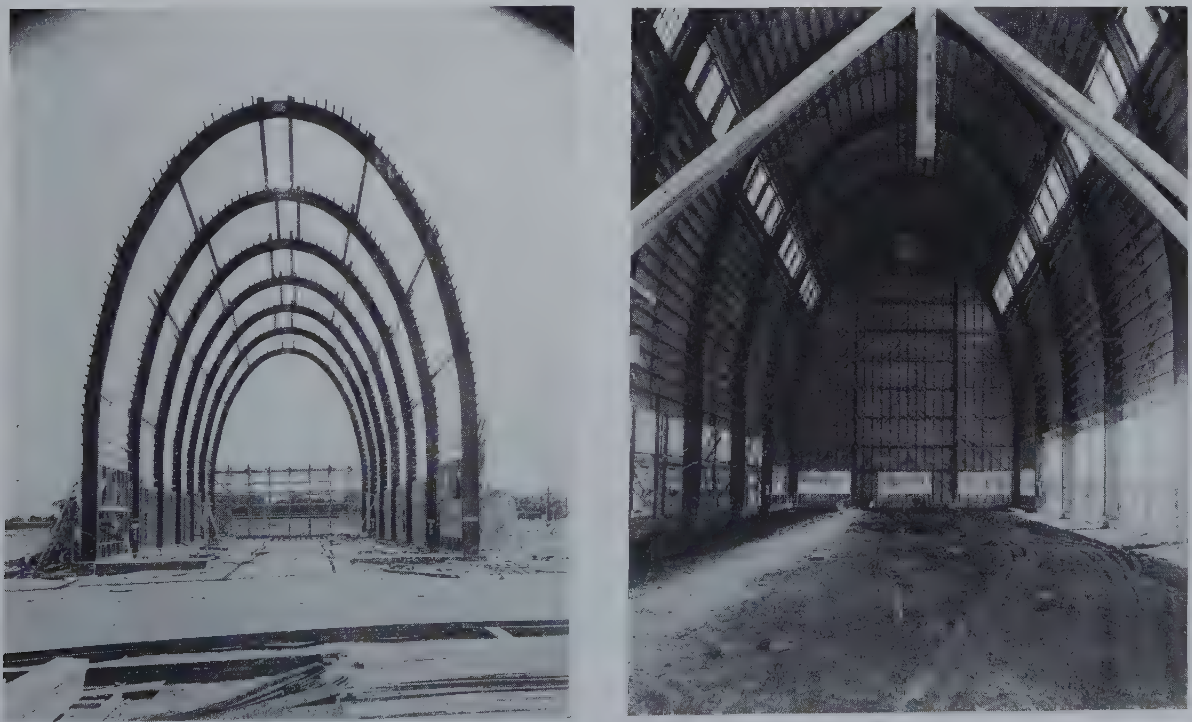


THE PLANT OF THE TAYLORCRAFT COMPANY (ABOVE) AT ALLIANCE, OHIO, ALSO WAS DESIGNED BY ALBERT KAHN, INC., ASSOCIATED ARCHITECTS AND ENGINEERS. THE SAME OFFICE IS HANDLING SCORES OF OTHER JOBS COMPARABLE TO THIS, REPRESENTING AN EXPENDITURE OF MANY MILLIONS OF DOLLARS FOR NATIONAL DEFENSE. ALBERT KAHN IS METICULOUS IN GIVING CREDIT TO HIS ORGANIZATION FOR ACCOMPLISHMENTS THAT HAVE MADE HIS NAME KNOWN AROUND THE WORLD AMONG ENGINEERS AND INDUSTRIALISTS, AS WELL AS ARCHITECTS. INTERESTING TO THE STUDENT OF STRUCTURAL FORMS IS THE REPUBLIC AVIATION PLANT (BELOW) BUILT BY TURNER CONSTRUCTION COMPANY AT FARMINGDALE, L. I. MONITOR SYSTEM IS EXPANDED TO ILLUMINATE TEN ACRES OF WORKING SPACE UNDER ONE ROOF. WINDOWS ARE CONTINUOUS



MANUFACTURING AND ASSEMBLY BUILDING FOR REPUBLIC AVIATION CORPORATION, FARMINGDALE, L. I.

GORDON B. KAUFMANN, LOS ANGELES, WAS THE ARCHITECT OF THE NEW VERNON PLANT OF THE ALUMINUM COMPANY OF AMERICA, A PERMANENT-MOULD FORGE FOUNDRY AND PLANT WHICH IS AN IMPORTANT UNIT (IT HAS GROWN 455 PERCENT IN AREA SINCE THE START OF THE WAR) OF THE ALUMINUM COMPANY'S $200,000,000 EXPANSION PROGRAM, WHICH THE COMPANY DESCRIBES AS "EQUIVALENT TO TWO DECADES OF PEACETIME GROWTH." THE PLANT SERVES THE ACTIVE WEST COAST AIRCRAFT INDUSTRY



LAMINATED WOOD ARCHES OF TEST BUILDINGS, LEXINGTON, KY., SIGNAL DEPOT—WILSON, BELL & WATKINS

OTIS ELEVATOR CO. AERONAUTICAL DIVISION
HARRISON, N.J.

EPPLE & KAHRS, ARCHITECTS & ENGINEERS, OF NEWARK, NEW JERSEY, DESIGNED THE ONE-STORY, FIVE-ACRE PLANT (ABOVE) FOR OTIS ELEVATOR CO., AERONAUTICAL DIVISION, AND THE DEFENSE PLANT CORP.

DEFENSE PLANT
FOR
JACK & HEINTZ INC.
BEDFORD O.
WILBUR WATSON & ASSOCIATES
CLEVELAND, O.

THE EXPANDED AIRPLANE STARTER PLANT OF JACK & HEINTZ, AIRCRAFT PARTS CONCERN OF CLEVELAND, IS BY WILBUR WATSON & ASSOCIATES, CLEVELAND. THIS FACTORY OF BRICK AND GLASS IS AT BEDFORD, OHIO

REPRESENTATIVE OF SMALLER INDUSTRIAL BUILDINGS COMPLETED RECENTLY AND PRESSED INTO SERVICE FOR SECONDARY DEFENSE CONTRACTS, IS THE CHARLESTON TRACTOR & EQUIPMENT COMPANY, DESIGNED BY FRANCIS GEORGE DAVIDSON, ARCHITECT, CHARLESTON, WEST VIRGINIA, FOR MANUFACTURE AND DISPLAY

WASHINGTON REPORT

COMPILED BY A. D. TAYLOR OF CLEVELAND

CANTONMENTS AND ORDNANCE PROJECTS

Further funds have been made available through the War Department for additions to Ordnance Projects now in process of construction. Supplemental contracts are being made with Architect-Engineers to provide additional services in the preparation of plans, specifications, and estimates, and to provide the required supervision during construction.

The schedule of fees paid for this additional service is materially less than the schedule established for the initial program of work (which for the Architect-Engineer approximated, on major projects, six-tenths of one percent.)

Additional cantonment projects have been announced and Architects-Engineers have been employed to prepare plans, estimates of costs, and specifications, with the understanding that lump-sum bids will be received in competitive bidding for the entire work of construction in accordance with the plans and specifications. Under this procedure, bids have been received to date on at least two of these cantonments.

The new program for cantonments is a part of the War Department long range planning program, in preparation for any increased demands in the further expansion of army activities. These new cantonments provide, in each case, for an army population of approximately 30,000 men, involving construction costs approximating $22,000,000.

The fee paid to the Architect-Engineer for the preparation of preliminary and final plans, specifications, and revised estimates of cost is $50,000 plus all reimbursable costs covering salaries for all assistants, traveling expenses when authorized, rental of equipment, etc. (This is the regular form of Architect-Engineer contract which has prevailed on major defense projects with the exception that a lump sum fee is adopted rather than a fee computed on a percentage basis, adopted for the early cantonments and ordnance projects.) In addition to the $50,000 as a fixed fee for the preparation of plans (to be completed within a three month period) the Architect is to be paid an additional fixed fee of $25,000 if his services are requested for supervision during construction.

At the present time (with the exception of three or four cantonments), no funds have been appropriated for the purchase of the sites or for the construction of the cantonment. In all probability substantial areas will be leased rather than purchased. A press release on this subject from the War Department, Bureau of Public Relations, under date of July 16th may be of interest.

The further list of cantonments not included in any of the past issues of Pencil Points is carried below.

The following cantonments reported in past issues of Pencil Points are authorized to go into construction under lump sum contracts: Ft. Smith, Ark.; Santa Maria, Cal.; Neosho, Mo.; Augusta, Ga.

The final plans for the following cantonments were scheduled to be completed about September 1st: Medford, Ore.; Cookson Hills; Columbus, Ind.; and Blackstone, Va.

TECHNICAL QUALIFICATIONS

In the Navy Department and in the War Department additional qualification data may be submitted as further evidence of one's qualifications for services on a contract basis under the regular Architect-Engineer form of contract. There is an increasing tendency to repeat professional contracts with those offices who have had experience in this work and whose record of performance justifies this further consideration of their employment. Because of the highly specialized nature of some of this work, and because of the organizations which have been established by these offices, the efficiency of operation procured through this procedure is quite evident.

★

DEFENSE PROJECTS

The Editors frequently receive requests for information, much of which is available in the form of releases already published, and referred to in past issues.

For those who may desire a list of major defense projects in any specific area, or who may desire employment in any specific part of the country, it is suggested that they

CANTONMENTS

TRIANGULAR DIVISIONS

Project	*Architect-Engineer*
Corvallis, Ore.	John W. Cunningham & Associates, and Lawrence & Allyn, Portland, Ore.
Morganfield, Ky.	Morganfield Architect-Engineers, Morganfield, Ky.
West Yellowstone, Mont.	Shanley, Van Teylingen & Henningson, Great Falls, Mont.
Waco, Texas (Reported in September issue)	(This cantonment to be relocated on another site because of existing oil lines.)
Marysville, Calif.	Lipponcott & Bowen, 2835 Gilroy St., Los Angeles, California.

OTHER PROJECTS

Barrage Balloon Center, Paris, Tenn.	R. H. Hunt Co., Chattanooga, Tenn. (Estimated cost, $5,255,000.00).
Air Corps Training School Midland, Texas	(Information not immediately available. Estimated cost, $2,800,000.00).

communicate with some representative of the State in Washington, in whose office there is usually kept a list of the projects within that respective State. Opportunities for employment on a salary basis with the Architect-Engineers can be procured only by communication with these respective offices. Employment through the Constructing Quartermaster's Office (representing the Government) is usually through the channels of the Civil Service.

REHABILITATION

The opportunities for employment of members of the technical planning professions in the extensive rehabilitation program will far exceed the expectations of those who have not carefully analyzed these possibilities for the future. The problem of rebuilding and re-planning the bombed cities of Europe will require far more technical personnel than will be available at the end of this war in the European countries.

A greatly increased activity is taking place in many of the forward-looking cities throughout the United States, in preparation for the time when, under a renewed Public Works program, funds will be available with which to accomplish rehabilitation, develop increased recreation facilities, eliminate additional slum conditions, and construct major highways to meet the increasing demands of modern day automobile transportation.

EMPLOYMENT OPPORTUNITIES

There seems to be a shortage of men available for employment, and qualified to provide the required technical services in the office of the Architect-Engineers, for these army projects. The period of employment is limited, and of uncertain duration. For this reason, and because of the abnormal expense incurred by employees who transfer their temporary residence to these construction projects, adequate salaries are paid to qualified men in the fields of engineering, architecture, and landscape architecture.

REGIONAL PLANNING

Because of conditions which have been observed, and the necessity for correcting these conditions within the region adjacent to major defense projects, increased emphasis is being placed upon the study of these regional problems which directly affect means and costs of transportation, increased population, relocation of population, traffic congestion on highways, overtaxing existing utilities, housing, zoning, and labor supply sources. Through funds made available to the National Resources Planning Board, consultants employed by the Board are reporting upon many of these projects, in connection with which no funds are available to the War Department with which to meet the costs required to correct these undesirable conditions within the regional area. Through funds made available to the Public Works Administrator in the Federal Works Administration, under the Community Facilities Bill, many of these abnormal costs are paid.

DRAFTSMAN'S MARKET

The present situation has been aptly described as "A Draftsman's Market." This statement is almost literally true, because of the extensive program of planning and of construction now in progress. How long this condition may prevail is anyone's guess.

TECHNICAL PLANNING PROBLEMS

There is increasing evidence to indicate that the technical planning professions should continue joint activities in the interest of the members of these professions in order to establish more desirable procedures with reference to (a) *per diem* fees for consulting services in the different Government agencies (now at considerable variance on this subject); (b) schedules of fees to be paid by Government agencies on the different types of defense work requiring the services of representatives of these professions; and (c) procurement, in the interest of the members of all professions, of a more logical procedure and a clearer understanding with reference to the rate of pay to which men are entitled for their technical planning services, and the policy to be adopted for payment of overtime. In some Government agencies, under certain conditions, overtime is paid at the rate of time and one-half, while in other Government agencies on certain types of defense work, overtime is paid for at the same rate as regular time, and on still other projects requiring abnormal and continued periods of overtime work no remuneration is paid for overtime. This last question is one of vital importance to the professions. It should not be permitted to continue in its present atmosphere of uncertainty and inconsistency of procedure without some adequate explanation from the Government agencies employing services on defense projects.

September 20, 1941

* * *

SPEAKING OF DEFENSE

"Properly conceived, camouflaging begins even before the building exists, and from first to last it is primarily a job for the architect. The selection of the site and its surroundings, the actual form of the building or buildings and their relation to one another, and the materials of which they are constructed are the elements of the problem on which the architect should be the chief expert from the very start. Unless that is understood, all that is subsequently done is just making the best or the least bad of a bad job."

Ian MacAlister, Sec'y.,
Royal Institute of British Architects

"There seems to be little doubt that a direct and realistic approach to the problem of architectural services in the truly low cost house field is essential. There is good evidence that the present standards of practice here are restrictive by strong implication if not in fact. This is also true in the industrial field.

"Such restrictive character should be removed. It is folly to let consideration of professional dignity and outworn tradition control deliberation. The great dignity and tradition of the profession rests upon its attainments and above all on its integrity. If that integrity is jealously guarded, the most drastic solutions of the complex problems of a rapidly-changing society can be adopted with impunity and benefit to all.

"In preparation for this, the Committee on Architectural Services urges the Board of Directors of the American Institute of Architects to authorize the necessary steps and studies to produce a simple, direct, and unequivocal restatement of those services, and then to publicize and support such a program to the end that the role of the architect in modern society be made clear to all."

American Institute of Architects
New York

PENCIL POINTS DATA SHEETS

Prepared by DON GRAF, B.S., M.Arch.

DISREGARD OF THE OBVIOUS

Years ago a Pencil Points editor wrote a little piece for the magazine to describe the new entrance lobby of a certain building material manufacturer's offices. This lobby had been tricked up very nicely with the manufacturer's own products. It was in the best of modern taste and created an extremely pleasant impression on the visitor.

Only one small detail had been overlooked. In the center of the ceiling hung a lighting fixture which distinctly did not belong. The editor ended his essay about the lobby with this sentence: "The only vestige of a glorious past is the lighting fixture in the middle of the lobby!"

The manufacturer is used to selling consumers. He knows how to approach them, he knows exactly the kind of sales appeals which will part the average American citizen from his wages in order to obtain the latest thing in household improvements. So when a new invention like electricity came along it was easier for both architect and manufacturers to design "reminiscent" fixtures to hang around on the walls and ceilings of existing buildings than it was to develop built-in lighting equipment for new buildings. Architects were no quicker than the manufacturers to detect the inconsistency of putting electric light bulbs in a pendulous mess of glass and metal which took its departure from the era of waxed candles and whale oil lamps. After 50 years we are entering an age of lighting wherein the fixtures are treated as if electricity is really here to stay and not a passing fancy.

But what about the other aids to Twentieth

LUMBER CLASSIFICATIONS

Index No.
A 5 q
MATERIALS

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

SET
20
OCT
1941

USE, SIZE CLASSIFICATION

YARD LUMBER. Lumber of all sizes and patterns which is intended for general building purposes. The grading of yard lumber is based on the intended use of the particular grade and is applied to each piece with reference to its size and length when graded, without consideration to further manufacture.

1. *Strips*—Yard lumber less than 2" thick and less than 8" wide.
2. *Boards*—Yard lumber less than 2" thick, 8" or more wide.
3. *Dimension*—All yard lumber except boards, strips, and timbers; that is, yard lumber from 2" to but not including 5" thick, and of any width.
4. *Timbers*—Lumber 5" or more in least dimension.

STRUCTURAL LUMBER. Lumber that is 2" or more thick and 4" or more wide, intended for use where working stresses are required. The grading of structural lumber is based on the strength of the piece and the use of the entire piece.

1. *Dimension (joists and planks)*—Lumber from 2" to but not including 5" thick, and 4" or more wide.
2. *Timbers*—Lumber 5" or more in least dimension.
    - 2a. *Beams and stringers*—Pieces of rectangular cross section 5" or more thick, and 8" or more wide.
    - 2b. *Posts and timbers*—Pieces of square or approximately square cross section 5"x5" and larger.

FACTORY AND SHOP LUMBER. Lumber intended to be cut up for use in further manufacture. It is graded on the basis of the percentage of the area which will produce a limited number of cuttings of a specified, or of a given minimum, size and quality.

QUALITY CLASSIFICATION OF YARD LUMBER

SELECT

Suitable for natural finishes

Grade A—Practically clear.
Grade B—Of high quality—generally clear.

Suitable for paint finishes

Grade C—Adapted to high quality paint finishes.
Grade D—Intermediate between higher finishing grades and common grades, and partaking somewhat of the nature of both.

COMMON

Suitable for use without waste

No. 1—Sound and tight knotted. May be considered watertight.
No. 2—Less restricted in quality than No. 1, but of the same general character.

Permitting some waste

No. 3—Prevailing grade characteristics larger than in No. 2.
No. 4—Low quality.
No. 5—Lowest recognized grade, but must be usable.

From *Simplified Practice Recommendation R16-39*, National Bureau of Standards

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GRATE REQUIRED FROM HOUSE VOLUME

Index No.
E 2 ac
MECHANICA

PENCIL POINTS DATA SHEETS PREPARED BY DON GRA

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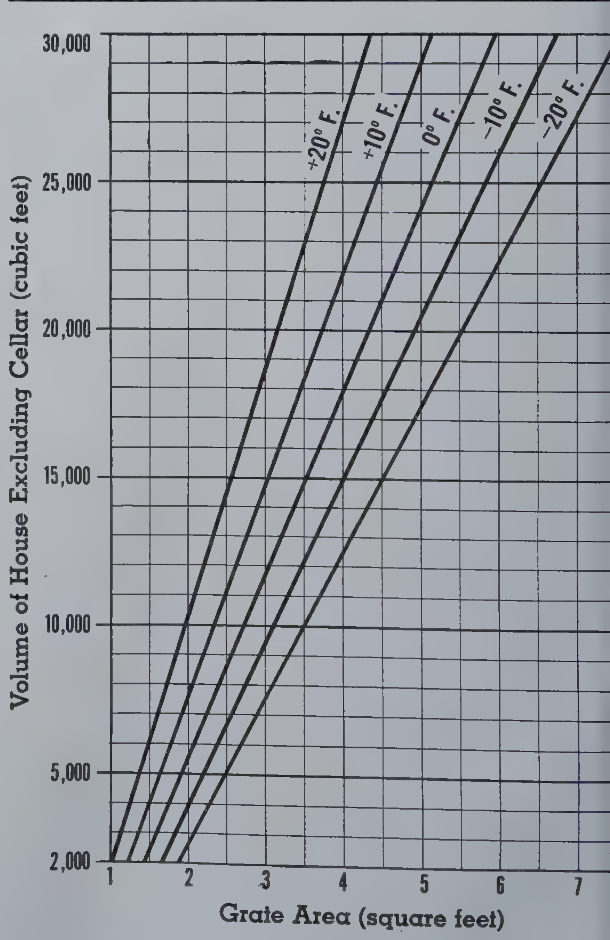
1941



This chart may be used to determine the approximate sizes of fu naces, boilers or heaters from sketch drawings, before plans have pr gressed to a stage where accurate heating calculations are possible. Th table should be used with discretion since a poorly built house will r quire a larger heating unit than that indicated.

Example. The chart shows that to heat a house of 19,000 cubic fe to 70° in —10°F. weather, a grate area of 4¾ square feet is require

The chimney size can be determined from the *Data Sheet* E2b

Century living? What about radios and plumbing fixtures and ice boxes and kitchen stoves?

What can happen with the products now designed for that most modern room in a modern apartment in a modern city—the kitchen? We see an electric refrigerator which is in essence a glorified ice box. It is up on legs because the old ice boxes had pans underneath them to catch the drip water—so the modern counterpart shows this vestigial anomaly.

As a matter of fact it isn't even as good in some ways as the old-fashioned ice box. The tenants of one particular apartment are prepared to make an affidavit as to the cash value of the china and glassware which has slid off the *rounded top* of their box onto the floor. The total is amazing.

The interior of this illegitimate offspring of the ice chest is no better than the exterior. The only compartment for the storage of milk bottles and other tall objects is just exactly wide enough so that it will not receive two bottles side by side, but is much wider than is needed for one. It is about 2 feet from front to back, so that to get the fifth container from the door the entire contents of the shelf must be removed and placed on top, then they frequently coast off the rounded corners.

The ice trays are guaranteed to stick just enough so that when you really get your blood-pressure up they will suddenly give way. There is a nicely-designed sharp edge of metal in exactly the right place to take the skin off your knuckles when this happens.

The over-all depth from the front of the box to the back is neatly calculated so that it doesn't line up with the face of anything else in the kitchen. The depth of cabinets has been fairly well standardized but the maker of this particular ice box has not discovered what the dimension should be.

(Continued on page 670)

SIZE OF CHIMNEY FLUE FROM GRATE AREA

Index No.
E 2 bb
MECHANICAL

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

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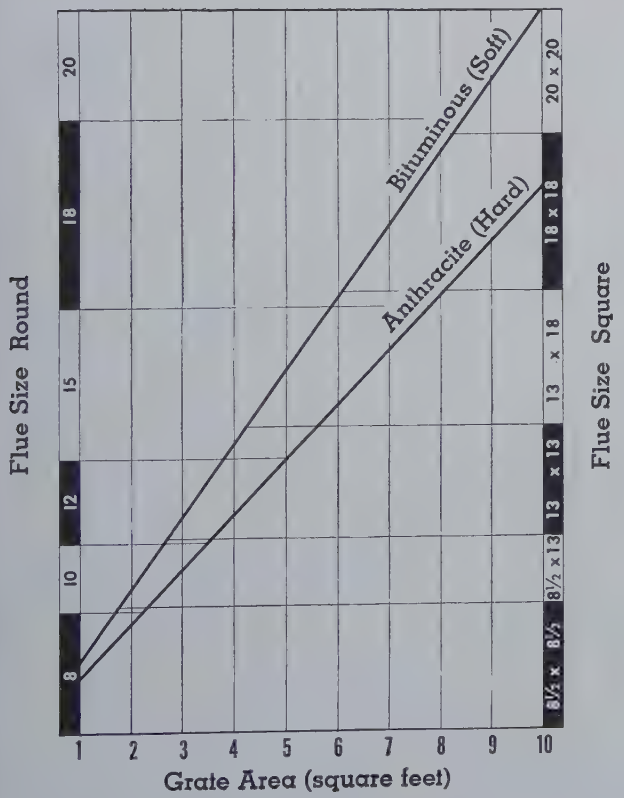

This chart will permit the determination of approximate chimney sizes from sketch drawings when the plans have not progressed to a stage where accurate heating calculations are possible. The chart is calculated from the formula:

$A = \frac{182G}{\sqrt{H}}$, in which:

A = the area of the flue in square inches (see *Data Sheet* E2a)
G = Grate area in sq. ft.
H = Height of chimney in feet, above the grate level

The chart has been calculated for a chimney 36 feet high — an average for most residential construction.

Example. A furnace, boiler or heater having a grate area of 6½ square feet would require a 15-inch round flue or a 13x18 rectangular flue for anthracite; an 18-inch round or an 18x18 rectangular for bituminous.

CEILING REPAINTING FOR INDIRECT LIGHTING

Index No.
E 3 o
MECHANICAL

PENCIL POINTS DATA SHEETS PREPARED BY DON GRAF

SET
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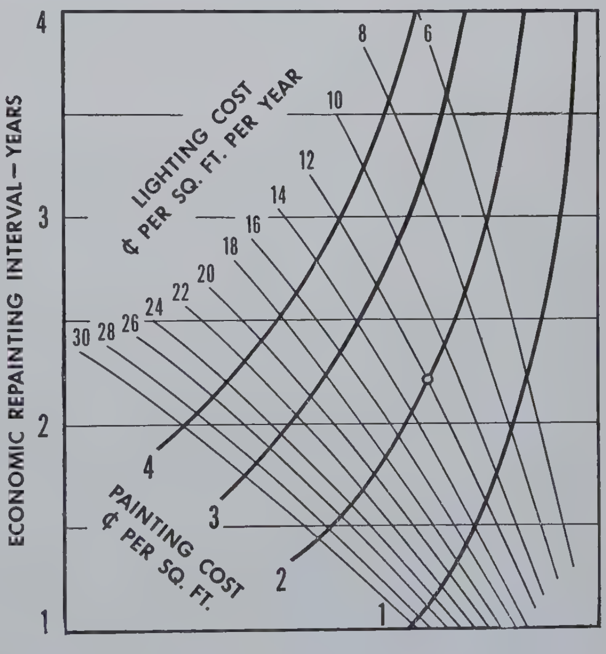
1941



This is a cost calculator to show how often ceilings of offices and institutional buildings should be repainted to secure maximum lighting efficiency at lowest cost.

This chart was developed by the General Electric Company, and takes into account the economical balance between the cost of light absorbed by *dirty and darkened* ceilings and the cost of maintenance. *Knowing* the cost of repainting per square foot and the yearly cost of light per square foot, the intersection of the lines representing these values should be carried horizontally to the time scale at the left side to get the economical repainting period where indirect lighting is employed for illumination. For instance, the chart shows that a ceiling should be repainted in about 2¼ years if the lighting cost is 12c. per square foot per year and the painting cost is 2c. per square foot.

It must be noted that the chart is based on an average accumulation of dirt and darkening from age, with a ceiling of usual materials.

If the dirt accumulation is lessened by means of air conditioning or if the darkening is retarded by the employment of more permanent surfaces, *the chart will not apply*. It is reproduced here as an illustration of the principle involved rather than as a quantitative basis for design calculations.

(Continued from page 669)

Another hold-over from the ice box days is the door. Why should ice boxes have doors? Why aren't they made like a chest of drawers with glass fronts? Then you could see what was in each compartment. Dehydration would be reduced and you wouldn't warm up the whole contents of the refrigerator every time you took out an ice cube.

The ice box interrupts the continuity of the counter formed by the stove, sink and cabinets. We can visualize a cabinet type unit with a porcelain interior but unfinished on the outside, all designed to slip into a standard kitchen cabinet base unit. Every man in architecture has at some time or another tried to make an electric refrigerator look like it belonged permanently in the kitchen. We have had grilles and cabinets and moldings and all sorts of tricks to make a piece of equipment which was portable in design look as permanent as it actually is.

We have been under the impression that the electric refrigerator was here to stay. *Why can't it be designed as such* so that the architect can make it an integral, permanent and functional part of the "laboratory of the home"?

PUBLIC RELATIONS

A FORUM EDITED BY D. KNICKERBACKER BOYD

A difficulty constantly encountered in attempting Public Relations work for the profession of architecture is the general disagreement among architects as to just what an architect is and just what proper architectural service consists of. It would seem worthwhile, therefore, to attempt to get a clearer definition than now exists of the terms architect and architecture. We broached the subject of a contest in the July issue, on page 493, and have received some advance replies which are hereby entered in a "no prize" contest.

As an indication of the need for a new definition of the architect, we append first some quotations from dictionaries defining architect. Thereafter are printed some definitions which we have observed or received in response to our original suggestion. Send in your idea and let us see if we can arrive at a definition which can be useful to all in connection with Public Relations. All such definitions should be addressed to

D. Knickerbacker Boyd
No. 4 South 15th St., Philadelphia, Pa.

DICTIONARY DEFINITIONS

Architect

(a) "From the Greek word meaning Master Craftsman or builder. Chief, principal, first in authority or order."

(b) "One versed in the art of building."

(c) "A master builder. A skilled professor of the Art of Design whose business it is to prepare the plans of edifices and exercise a general superintendance over the course of their erection."

(d) "One who designs and frames any complex structure, especially the creator. One who arranges elementary materials on a comprehensive plan."

(e) "One who so plans, devises, contrives or constructs as to achieve a desired result especially when the results may be viewed figuratively, as an edifice; a builder up."

DEFINING THE ARCHITECT

(1) The first paragraph (in italics) of the following, taken from the "Northwest Architect" is offered as a contribution by the Minnesota Association of Architects to the "Definition" Contest. At the same time we commend the Association for the article itself.

ARCHITECTS SELL SERVICES—NOT MERELY BLUEPRINTS

When the function of an architect is reduced to fundamentals it might well be defined as that which is necessary to provide a building fulfilling the owner's desires and needs in a manner which is practical and economical in plan, efficient in operation, pleasing in appearance, financially sound, and orientated to obtain the fullest benefits and satisfaction from the property or site.

Surely the above is no small order, but true architectural services must cover the above points and often many more.

Because of this fact it is necessary that the public be informed as to what constitutes architectural service and that "blueprints" are merely records of ideas, of hours, sometimes days of analysis and study of a problem.

The public must be made to realize that "a set of blueprints" and a few hen scratches for a specification as furnished to them "free" (?) by "carpitects" and certain lumber yards and millwork firms do not provide architectural services and in almost every instance Mr. Owner gets what you usually get when you get something for nothing.

Every architect should constantly promote the facts as to what true services consist of—our better contractor friends—certain material firms—a few financing people—will help us, BUT we've got to do most of the blowing of our own horn.

Decide now that you will do your part and when a comprehensive plan of publicity is presented for action by the Association through its Committee on Public Relations and Education let's get behind it with not only the necessary moral support, but the financial means to "sell" architecture to the public.

SOME MORE DEFINITIONS

(2) "An architect is one who advises on matters relating to, and designs and supervises the construction of building structures and building projects of all kinds."

(3) "AN ARCHITECT IS ONE SKILLED: through natural talent, special training, study and experience; IN SOLVING BUILDING PROBLEMS: related to planning, correct usage of materials and equipment, and construction methods: TO ACHIEVE THE GREATEST POSSIBLE VALUE IN UTILITY, DURABILITY AND AESTHETIC BEAUTY."

Discussion on Definitions

(4) "In defining the architect, from the standpoint of public relations, we should bear in mind that by far the largest volume of business that we receive comes from interests that are, and must be, concerned primarily with costs and budgets, revenues and returns, and practical workable solutions of their building problems. Even the U. S. Government, in withholding work from us, disregards the artistic equation and uses the excuse of economy."

(5) "When I first began the practice of Architecture, quite a few years ago, I felt that I had in my own mind's eye a very clear picture and conception of the proper answer to this question. However, during the intervening years, my experience with clients has taught me that the true answer does not lie wholly within the realms of the Architect's own conception, but is also dependent to an even greater degree upon what the public expects, or

rather has a right to expect, of the Architect. It has been apparent to me that some expect too much, even to the point of magic, whereas others expect too little, to the point of disdain. Both groups are equally wrong. The profession can influence and guide the public in "what it has a right to expect" through the process of education along these lines. General agreement upon the proper answer to this question should be had and formulated into a clean cut concise statement that is readily understandable by the public."

(6) "Architects must render such comprehensive and competent service that everyone will thoroughly recognize their ability in the field of building operations. Architects in general are too engrossed in their own immediate problems to interest themselves in, or to give time and effort to, public affairs. Thus, the reaction of the general public is to consign architects to the limited field to which they have limited themselves. Such public service given by the architect may not bring monetary return, but it must surely engender public respect both for the individual architect himself and for the profession as a whole.

"The architect who will contribute time and effort to civic affairs, to general educational problems, and to the advancement of the arts, and who keeps abreast of the changing conditions of the times and adapts himself to them for the benefit of the community in which he lives, will eventually strengthen his own position and bring to the community a knowledge and appreciation of the architect as a man of character, vision, judgment, and practical ability."

Authorship of the above definitions and discussions is for the time being kept anonymous, to be disclosed later.

EXHIBITS & EXHIBITIONS

(6) Proposal made to portray COMPLETE FUNCTION of the Architect in an Exhibition to be named "AMERICA TODAY AND TOMORROW." The letter printed below is self explanatory. It was placed before the Executive Committee of the Institute by President Shreve, is being studied now, and will come before the Board of Directors at the next meeting in October.

July 30, 1941

Dear Mr. Shreve:

We heartily indorse the view, expressed by our public relations committee meeting here in joint conference, that a concerted and unprecedented effort must be made by the profession to insure the survival of the architect during the present national emergency and the post-defense period.

Representations to Government of other official groups will be futile unless they are accompanied by forceful, dramatic action to impress upon the public the architect's vitally important function in the national scene. This profession has so far failed even to attempt any effective plan.

The Royal Institute of British Architects, recognizing a similar situation in Britain, is taking concerted action despite the stress of war conditions and has appealed to us to do likewise. The R.I.B.A. is devoting special attention to modern exhibit techniques as a potent weapon of public information to this end.

In the United States, architectural groups have presented various highly interesting exhibits which, however, deal in the main with only one phase of architecture—residential work. We consider that the time is ripe for the presentation of exhibitions illustrating the architect's *complete function.*

An exhibition of this type should portray the architect's function in relation to city, regional, and national planning, immediate and post-defense; national defense projects, defense housing and civilian defense; public works and industrial structures; public and commercial buildings; civic housing projects and private residential work; the basic objectives being to emphasize the little appreciated importance of the architect as "layout" expert, designer, planner, and coordinator under immediate and post-defense conditions.

We consider that a national exhibition, to be named "America Today and Tomorrow", should be presented by the A.I.A. in cooperation with the Producers' Council say in Washington, New York or other appropriate center. Concurrently, regional exhibitions on a smaller scale should be circulated in other cities.

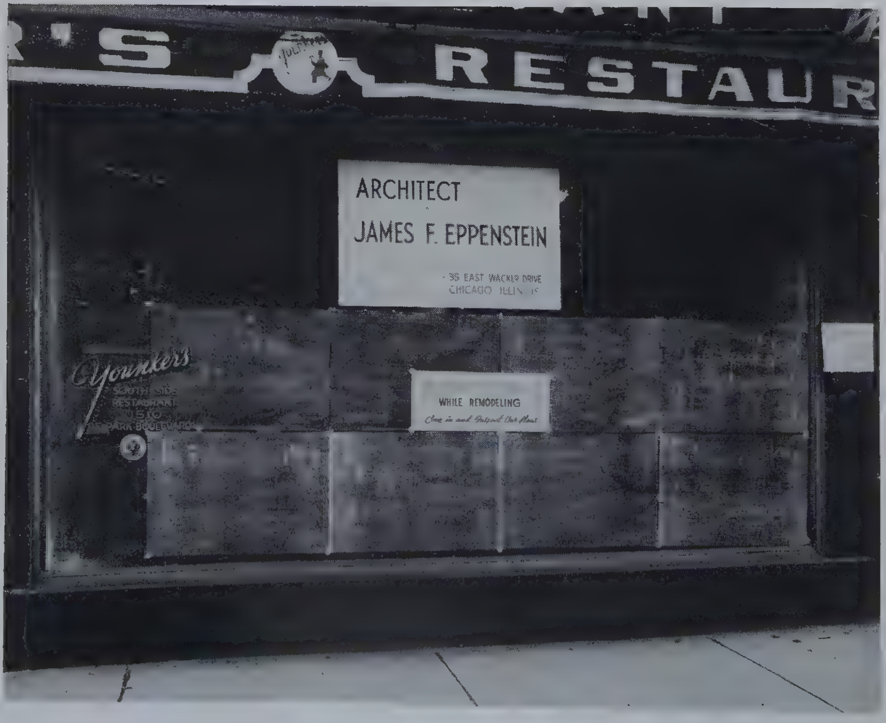
For exhibitions of such public interest and impersonal character, an admission charge might appropriately be made, proceeds to be devoted to the public relations funds of architectural organizations participating and to approved community betterment projects.

We would appreciate learning of your reaction to our proposal and assure you of our fullest cooperation.

Very sincerely yours,

(Signed) A. APPLETON.
President, AIA,
Northern California Chapter,
68 Post St., San Francisco.

FREDERICK H. REIMERS,
President, State Association of
California Archts. (Northern Section),
557 Market St., San Francisco.

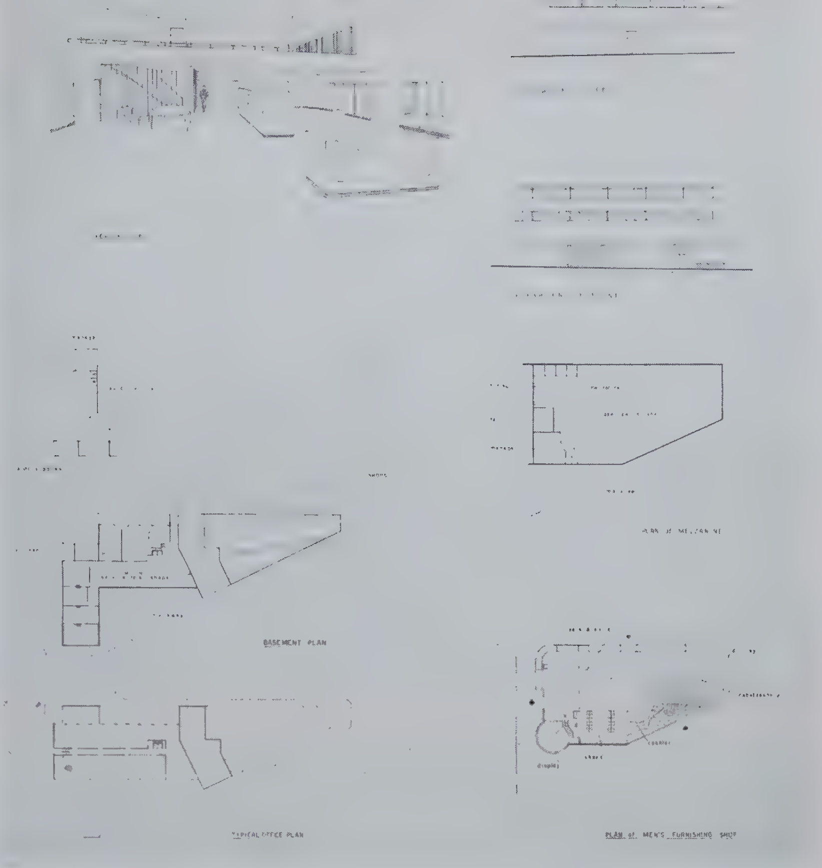


Public relations and showmanship reminiscent of John D. Rockefeller, Jr.'s Radio City "Sidewalk Superintendent's Club" was displayed by Architect James F. Eppenstein of Chicago on a smaller scale during remodeling of Younker's Restaurant in Chicago.

Business continued during remodeling. The plate glass front was covered with blueprints of the job, and a sign invited the public to drop in and inspect the plans spread on a large drafting table.

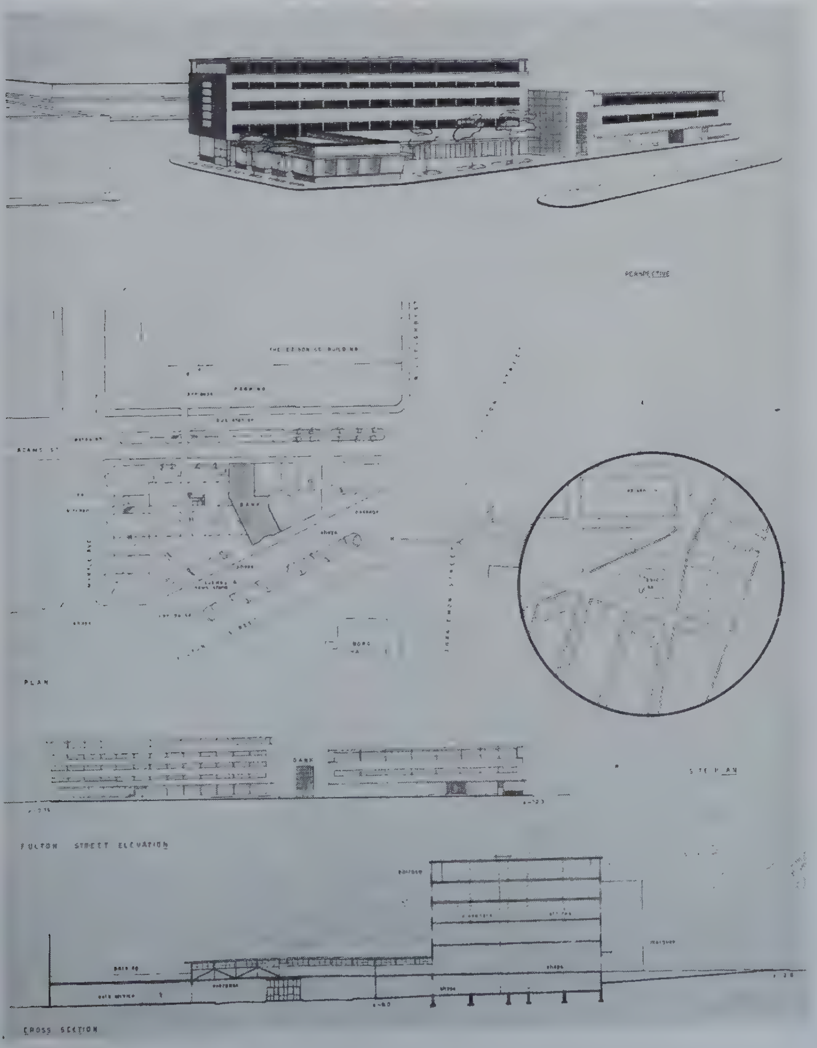
The remodeling, approximately $20,000 in value, divided Younker's low-priced main floor restaurant into a cocktail lounge and a medium-priced dining room. The basement was kept for lower prices.

Richard Younker, owner of the restaurant, stated that the interest customers displayed in the plans and the remodeling helped greatly to reduce the inconvenience expected during construction.



THE WINNING DESIGN BY MAYHEW SEISS WAS A COMPARATIVELY OPEN SCHEME, AS SHOWN BY THE ILLUSTRATIONS ON THIS PAGE. THE MAXIMUM BUILDING AREA WAS NOT USED, AND THE HEIGHT OF THE OFFICE BUILDING WAS RESTRICTED. THE DESIGNER CONCENTRATED UPON CIRCULATION OF PEDESTRIANS RELATIVE TO THEIR USE OF THE PLAZA, THE BUS STATION, AND THE STORES. THE BANK WHICH IS NOW ON THE SITE, AND WHICH IS PRACTICALLY NEW, IS MADE THE CENTRAL ELEMENT OF THE COMPOSITION

"FULTON STREET—1942"



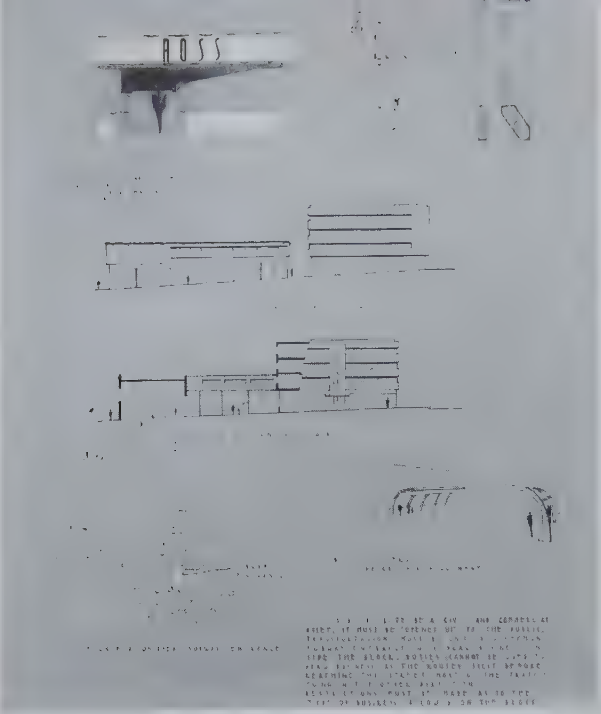
Encouraged by the removal of the Fulton Street elevated structure in Brooklyn, N. Y., the Downtown Brooklyn Association recently sponsored an architectural competition and building exhibit, "Fulton Street—1942," which afforded an excellent public relations opportunity for architects and architectural students.

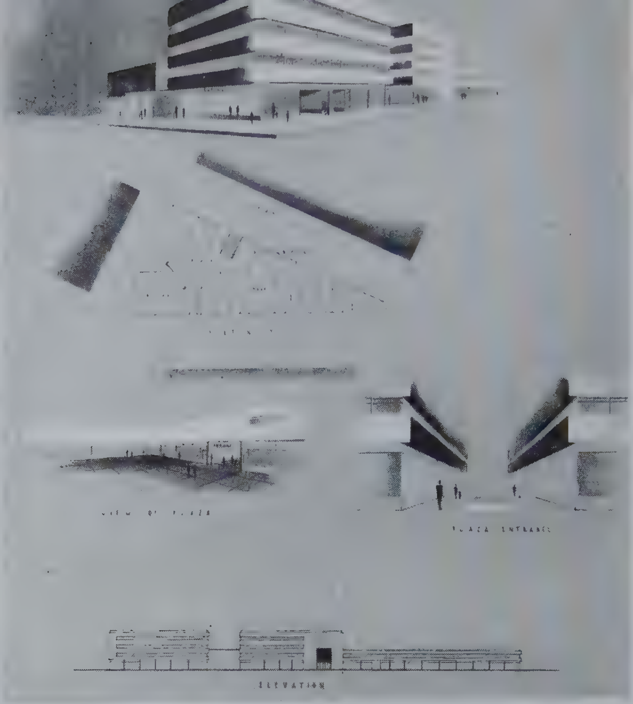
To acquaint the public with the proposed rehabilitation of the street, the Association sponsored a competition for architectural students at Pratt Institute, Brooklyn. Purpose of the competition was the improvement of the block near the Borough Hall. The improvement had to be practical commercially, but the form was left to the student to decide.

How the students solved the problem may be seen from the winning designs presented on this and the following page. *Mayhew Seiss,* who was graduated last June, won the first prize of $250 awarded by the Association. Second prize winner of $50 was *Daniel Chait,* a second year student. Honorable mention was given to *Ralph Larsen,* who was graduated with a certificate last June.

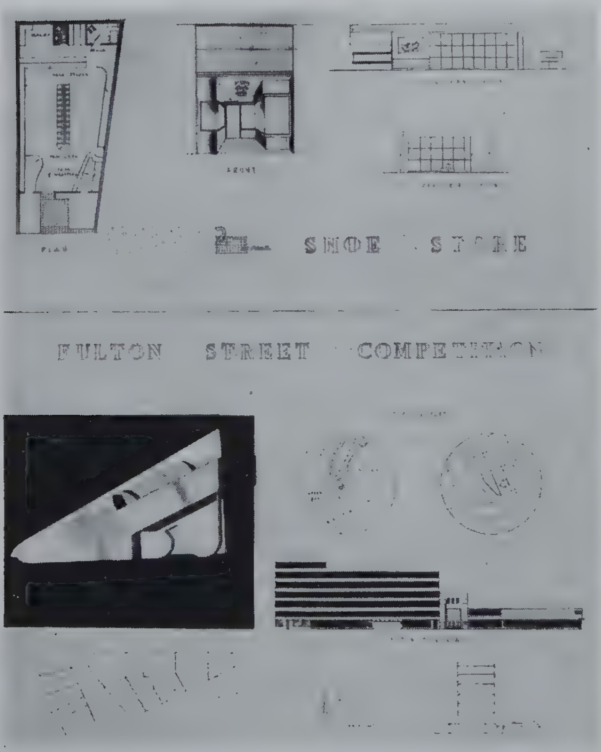
Judges of the competition were *Francis Keally,* of Githens & Keally, New York; *Robert E. Blum,* President, Abraham & Straus department store; *Thomas A. Swift,* Executive Secretary, Downtown Brooklyn Association; *C. C. Briggs,* Su-

(Continued on page 676)

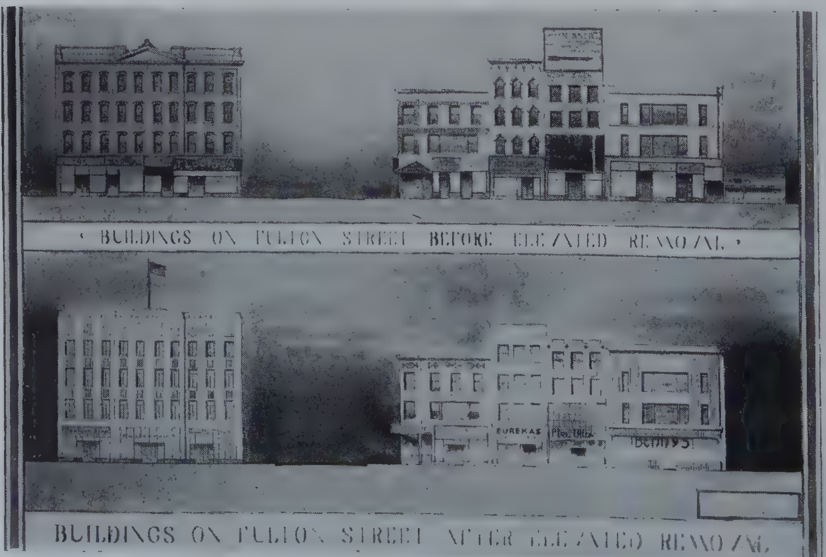




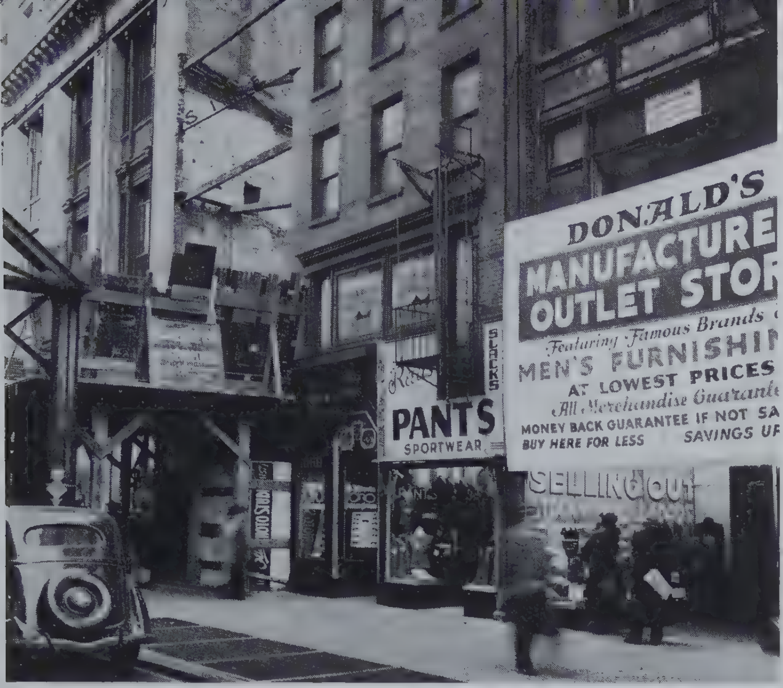
THE PARTI WHICH WON SECOND PRIZE IS SHOWN ACROSS THE TOP OF THE PAGE. IT WAS DEVELOPED WITH PARTICULAR EMPHASIS UPON THE DETAILED STORES. CIRCULATION ON THE FIRST FLOOR WAS ENTIRELY DIRECTED TO ASSIST THE MERCHANT IN GIVING MAXIMUM DISPLAY AREA. THE PRACTICALLY NEW BANK WAS COMPLETELY REFACED, AND INCORPORATED INTO THE NEW STRUCTURE QUITE IN THE SAME MANNER AS THAT SUGGESTED BY THE FIRST PRIZE DESIGN. DONALD CHAIT, PRIZEWINNER

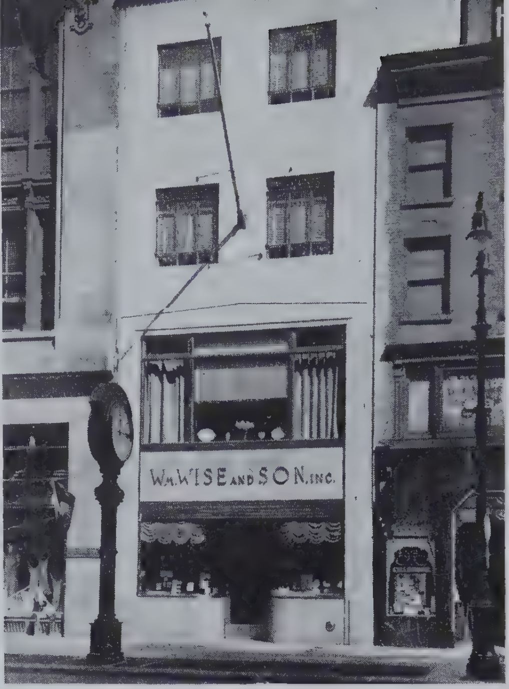


THE DESIGNER RECEIVING HONORABLE MENTION KEPT THE BANK BUILDING IN ITS PRESENT FORM AND DEVELOPED A VERY DIRECT CIRCULATION THROUGH THE BLOCK TO THE BUS STATION WHICH, IN ALL THREE PRIZE-WINNING DESIGNS, WAS PLACED ON THE STREET BACK OF THE BLOCK IN QUESTION, AND AWAY FROM THE HEAVY TRAFFIC OF THE PLAZA. DESIGNED BY RALPH LARSEN

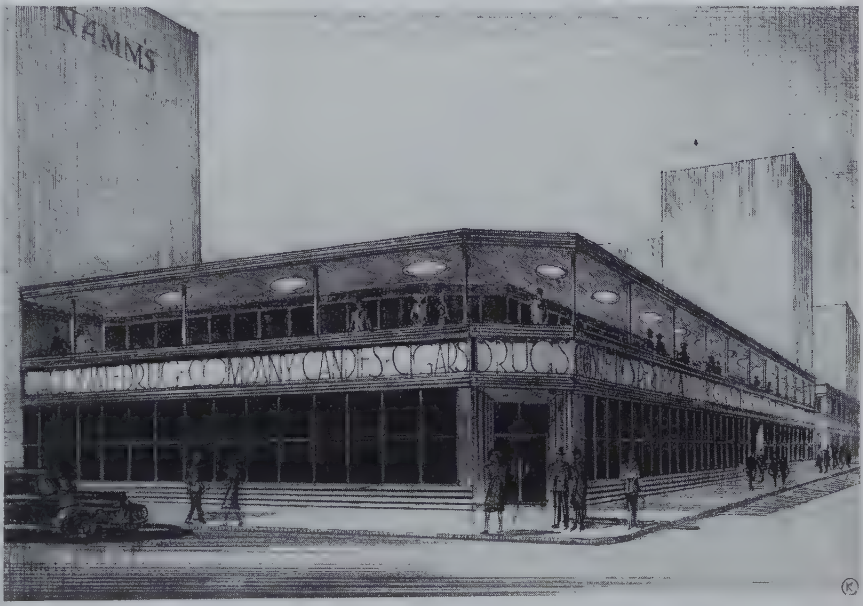

BUILDINGS ON FULTON STREET BEFORE ELEVATED REMOVAL
EUREKAS
BUILDINGS ON FULTON STREET AFTER ELEVATED REMOVAL

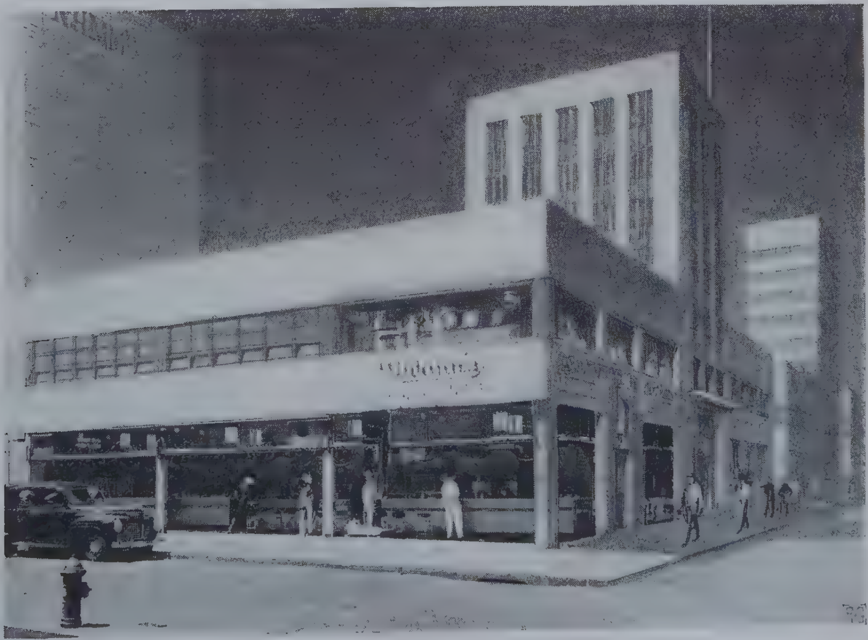
SLEE & BRYSON, BROOKLYN ARCHITECTS, SUBMITTED THIS BEFORE-AND-AFTER PRESENTATION AT THE BROOKLYN EXHIBIT

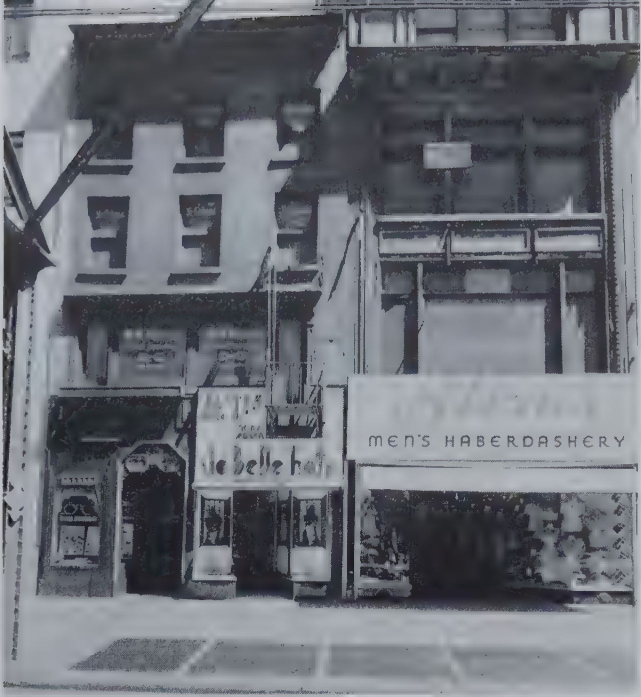


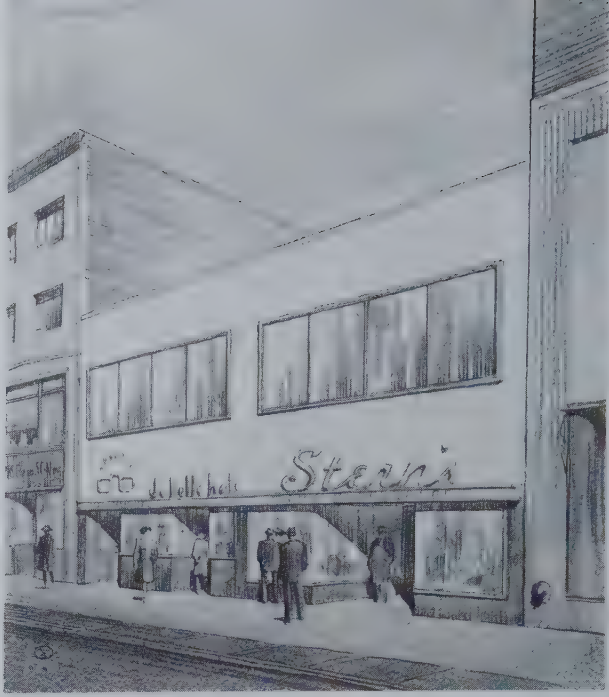


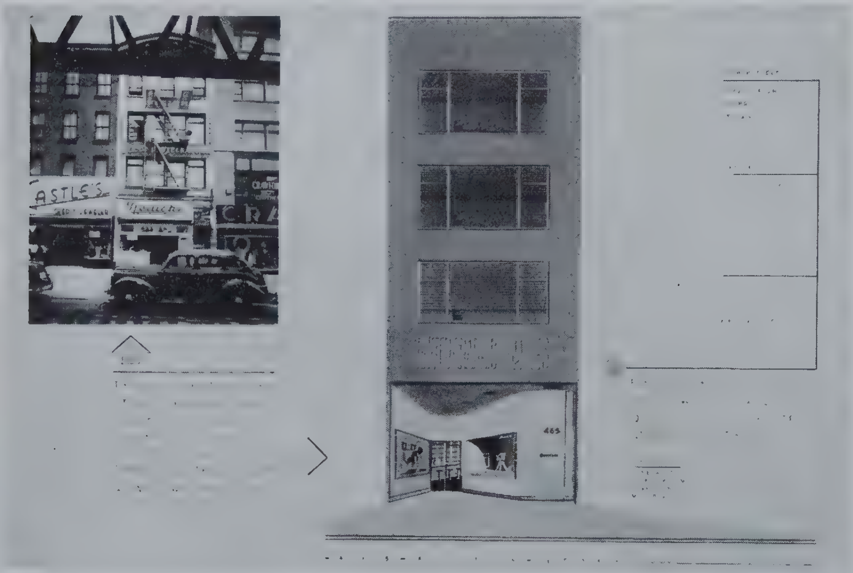
AT THE TIME OF THE EXHIBIT, WORK WAS ALMOST COMPLETED ON THE NEW BUILDING FOR WM. WISE & SON, INC., FOR WHICH BENJAMIN DRIESLER, JR. WAS THE ARCHITECT. THE VIEW AT TOP, RIGHT SHOWS THE BUILDING AFTER THE ELEVATED STRUCTURE HAD BEEN REMOVED. THE FIRM OF GITHENS AND KEALLY, NEW YORK ARCHITECTS, SUGGESTED TWO POSSIBLE TREATMENTS FOR THE SAME BUILDING (RIGHT AND BELOW). FRANCIS KEALLY SUGGESTED THE SOLUTION SHOWN AT THE RIGHT, WITH A PROMENADE RUNNING AROUND THE SECOND FLOOR, WHILE ALFRED MORTON GITHENS' DESIGN IS SHOWN IN THE ILLUSTRATION AT THE BOTTOM OF THE PAGE



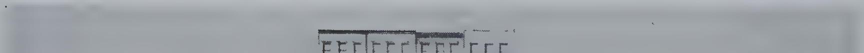








ACROSS THE TOP OF THE PAGE IS THE SOLUTION OF THE PROBLEM AS DESIGNED BY LORIMER RICH. C. C. BRIGGS IN HIS DESIGN (CENTER) CREATED A PHOTOGRAPHIC SUPPLIES STORE TO SUPPLANT THE EXISTING BUILDING. KOCH & WAGNER, BROOKLYN ARCHITECTS, TOOK FOUR EXISTING BUILDINGS AND COMBINED THEM INTO A SINGLE STRUCTURE

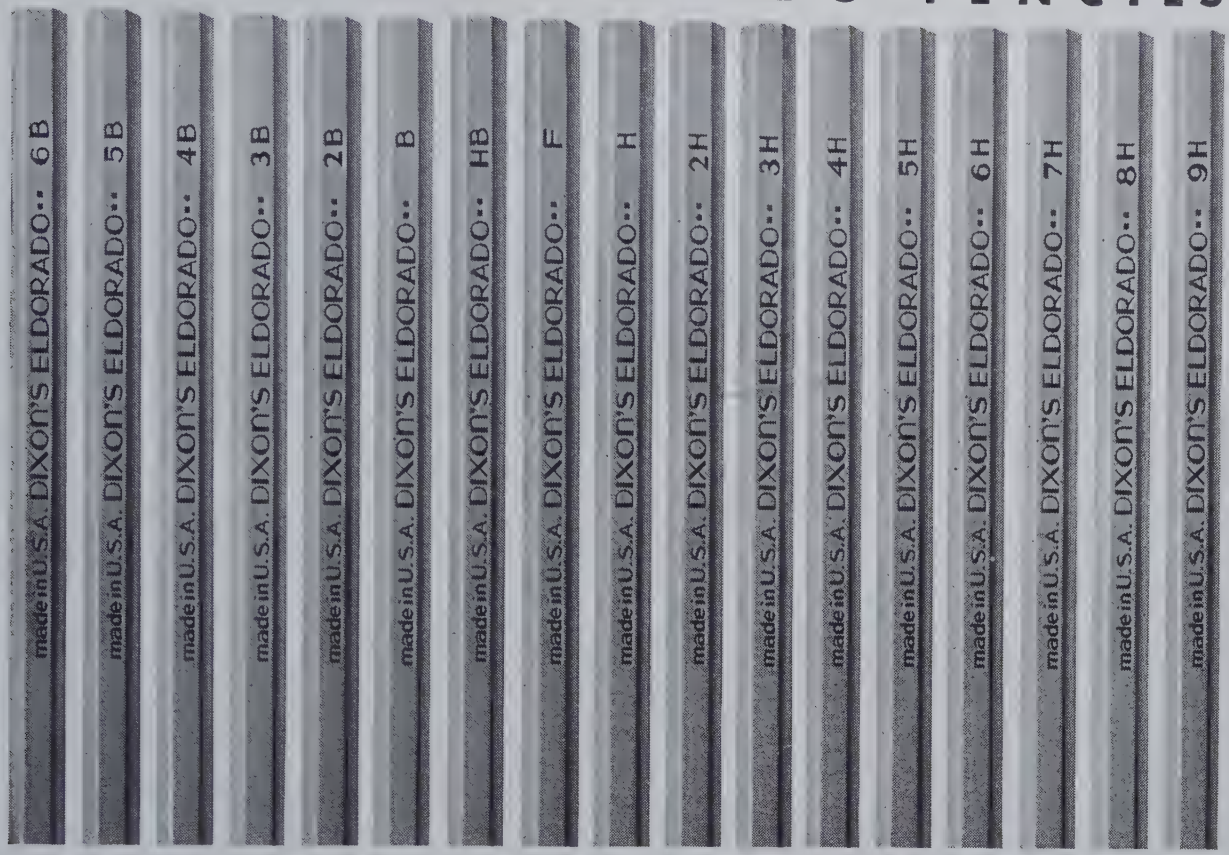


pervisor, Department of Architecture, Pratt Institute; *Robert Shaw,* Brooklyn architect; *Charles Pratt,* President, Pratt Institute.

To impress upon the public the need for the services of the architect, the Association also asked six architects to submit plans and sketches of new buildings and proposed alterations to old buildings on Fulton Street. Each architect was given an existing building on the street and asked to submit sketches of his proposed solution for the problem. These are shown with this article.

The Association reported that the 6,000 visitors who saw this exhibit were made better acquainted with the nature and value of the services of the architect. As a result of the exhibit, several property owners have already inaugurated plans for extensive remodelling of their places of business, the Association stated.

TYPHONITE ELDORADO PENCILS


made in U.S.A. DIXON'S ELDORADO•• 6B
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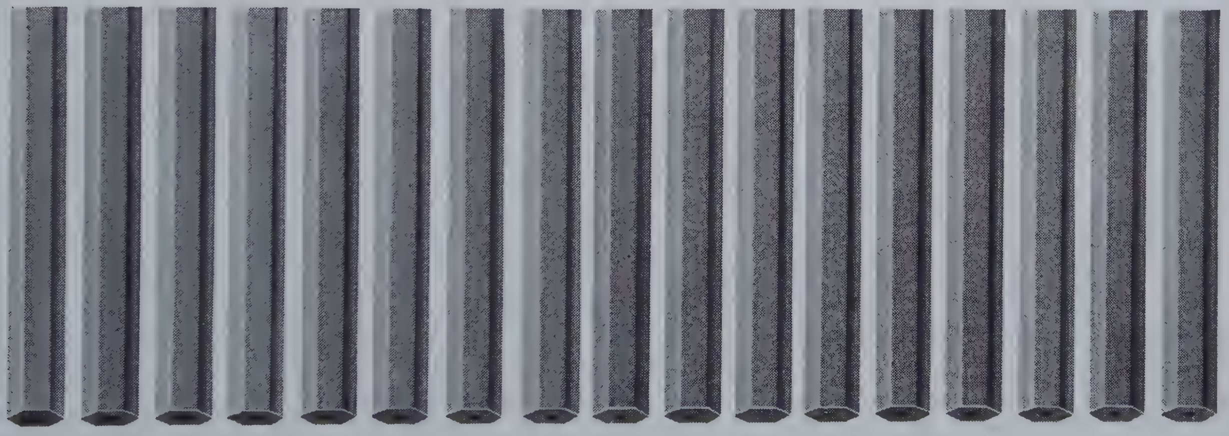
17 DEGREES, *like 17 parallel lines . . .*



. . .THEY NEVER MEET!

Never will you pick up a Dixon's *Typhonite* Eldorado stamped "2H" and find that it is a "3H" or an "H" in performance. Like parallel lines, the 17 degrees of *Typhonite* Eldorado never meet. Such uniformity is possible only because Eldorado leads are made from *Typhonite* particles that are minute twins. Each particle is minute in size, and each is the same size.

To achieve this perfection Dixon creates a new form of graphite in a typhoon of superheated steam. This new form is called *Typhonite* and the *Typhonite* process is exclusive with Dixon.

But uniformity is not all you should ask of a drawing pencil. Its lead must be strong and dense and smooth. Test *Typhonite* Eldorado for these qualities. And make the tests tough.

To test for strength, sharpen a *Typhonite* Eldorado to the finest point. To convince yourself that Dixon's *Typhonite* Eldorado pencils are smooth and opaque even in the hardest degrees, test the H degrees. Make these tests and know that there is no other pencil like Dixon's *Typhonite* Eldorado.

Your dealer carries Dixon's *Typhonite* Eldorado.

Pencil Sales Department 167-J10

JOSEPH DIXON CRUCIBLE COMPANY, JERSEY CITY, N. J.

HERE, THERE, THIS AND THAT

BOSTON NOTES

"Where are you working this week?" is the most familiar sound to this era's ears, when they are attached to draftsmen. The answer is likely to be such as *Stone & Webster, Charles T. Main, Fay, Spofford & Thorndike,* etc.—engineers all. Architects have work in spots, though the picture is hardly maculated, and that Damoclean sword of priorities makes them justifiably unhappy. Eventually all buildings for the civil population may have to be made of rammed earth or put off until later, so the draftsman had better check on defense tie-ups at his proposed place of labor. This, the day of the engineer, finds *them* with nothing but; therefore the rush thitherwards!

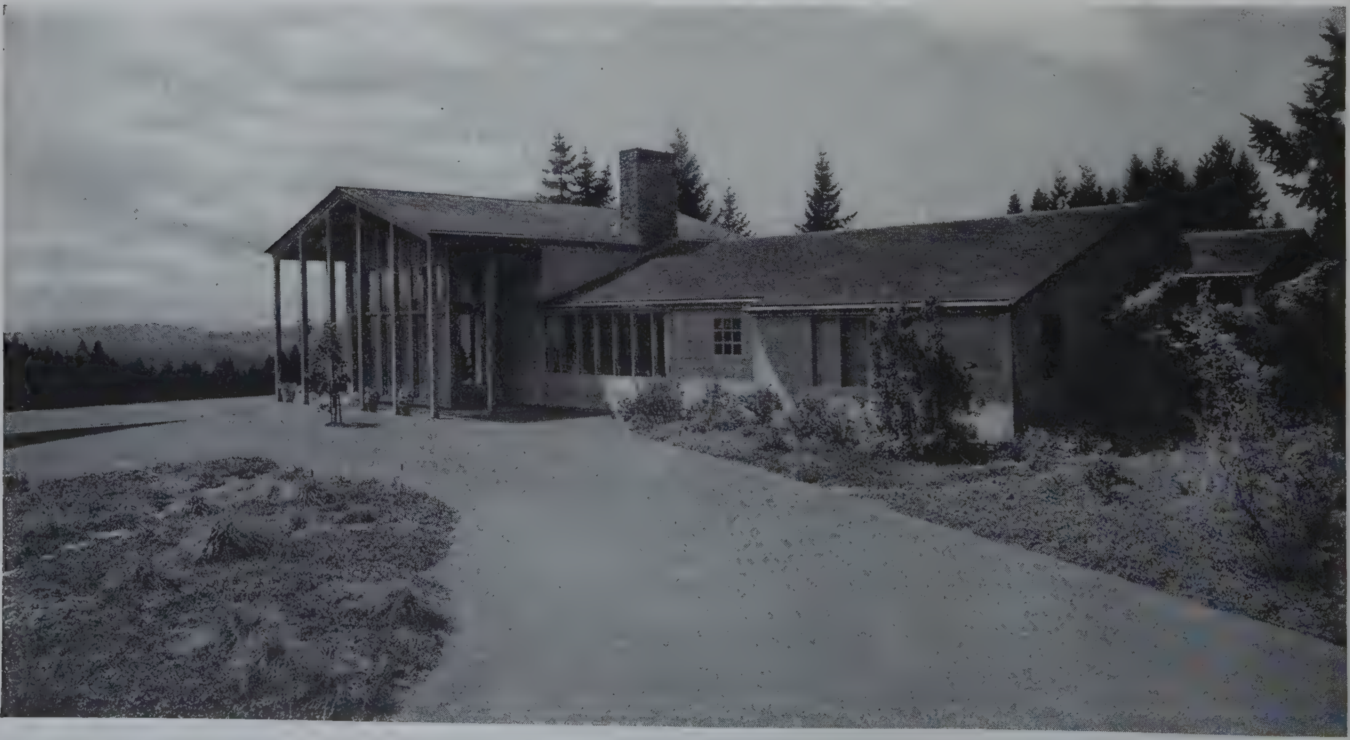
Among the boys there was the secret hope of a labor shortage, the better for a non-union craft to come into higher wages despite itself. And there is a shortage, but it isn't short enough to offset the shoals of reconditioned draftsmen from all quarters and trades who are taking a flier on defense work. In this town you sometimes get the slightly exaggerated impression that you are acquainted with lads in about all the better-known large and small offices, many of them belonging to one or more of our organizations. Men of this Boston Group now report more completely strange faces among the engineers' architectural crews than you could shake a stick at. Hence the pyramids and average hourly wages which take little account of short hauls and no vacations, sometimes no holidays; take more account of pay-checks swollen with psychological effect from occasional spells of overtime.

Local wanderers are many, and two who come to mind, *Rea Esgar* and *Silvio Zanetti,* have entered upon new works in pastoral Mississippi. *Lloyd Hendrick* is now architect at Camp Edwards, and *Lawrence Howard* shepherds a group of our youth at the Army Base, asylum for numerous architects and their helpers.

Probably the most notable item since *Henry Murphy* told the writer either to buy an ear trumpet or a dictionary of brogue is that after eighteen years in one office *Phil Levi* saw a great light and pulled up stakes. Day of the faithful retainer is by no means over, but redefinition has shortened the tenure necessary for winning an F.R. with lead-covered palms, from five years to three months. Short of a proprietorship you're getting old or need fresh spark-plugging if you can't find a new and better solution for your private struggle for existence "every so often."

Relaxed groups spoked about a beer keg sometimes consider such battle excerpts as the foregoing and ask, "What does it git ya?" Extra small change but no tinsel, and when the money's gone in a few weeks (a month or two for the Boston Archiscots) your recollection of its garnering is not graced by any of the flourishes that color life in old line offices which have a touch of the private club about them. If some bird hadn't tried to prove to the hired hands that the financial abnegations frequently associated with tinseled offices were an inherent part of one's "professionalism," instead of explaining that it was just Nature's price for a

(Continued on page 62)



On exhibit at the Museum of Modern Art, New York, during September, was the circulating exhibition, "The Wooden House in America." It traces, through historical and explanatory material, the changes in wood construction and design as affected by the development of building tools, by the country's growing prosperity, and by imported styles. Pictured were the hand-hewn log house, the heavy construction of New England Colonial homes, the refinements of the Georgian era, the development of the light stud frame, and modern experiments in construction. The house shown here was designed in 1937 by John B. Yeon (with A. E. Doyle & Associates, Architects), Portland, Oregon, for Aubrey Watzek. Other architects represented were Gregory Ain, Frank Lloyd Wright, Walter Gropius, Marcel Breuer, Harwell Hamilton Harris, John Funk, Carl Koch, and George Howe

NEWS-FACTS USG

ROCKLATH EDITION
Aug.-Sep.-Oct. Vol. 1 No. 8-9-10

Published by the UNITED STATES GYPSUM COMPANY, 300 West Adams Street, Chicago

Bureau of Standards Releases New Fire Test Results

1-HOUR RATING FOR PLASTER AND PERFORATED GYPSUM LATH PROVES HIGH FIREPROOFING VALUE OF ROCKLATH

In the Bureau of Standards Report BMS71, just released, fire ratings for partitions are given, which show that practical constructions *are available* that will meet fire-resistance requirements. The report covers partition constructions representing a wide range of materials and design. The results will enable regulatory bodies to require given ratings for partitions in certain locations. The architect will be able to select a construction of the most advantageous type in a given building or project, to obtain the desired fire resistance at lowest cost.

B. OF S. FIRE RATINGS FOR SOME TYPICAL WALLS

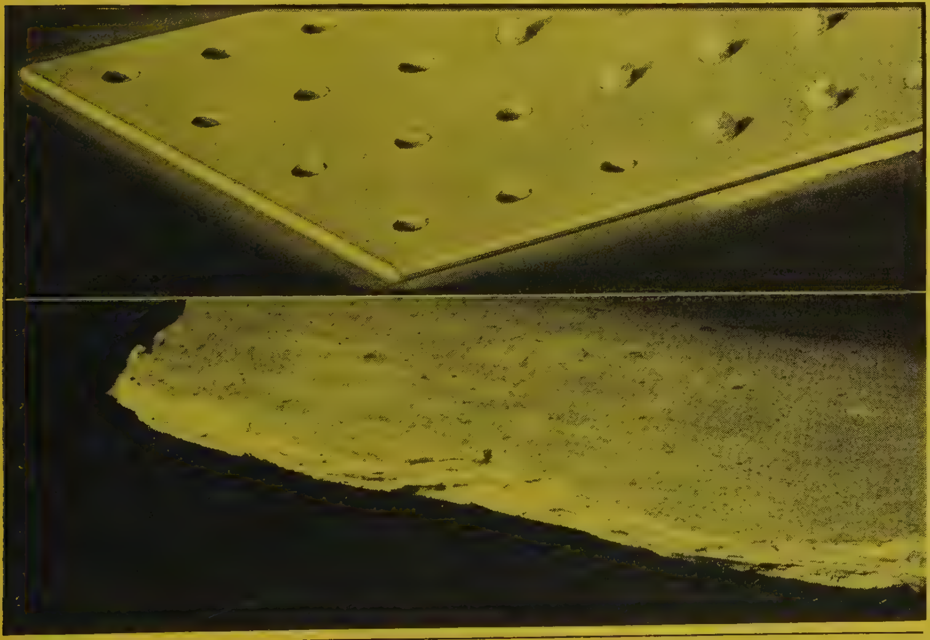
Plaster Base	*Plaster**	*Rating*	*Test No.*
Wood Lath	Gypsum-Sand	½ hour	M, N.
½″ Fiber Board 0.7#/sq. ft.	Gypsum-Sand	½ hour	M, N.
⅜″ Gypsum Board plain	Fibred‡ Gypsum	1 hour	1, 2.
⅜″ Gypsum Board plain or indented	Gypsum-Sand	¾ hour	F, et seq.
⅜″ Perforated Gypsum Board	Gypsum-Sand	1 hour	16 et seq.
Expanded Metal	Gypsum-Sand	1 hour†	L

*Two coats of plaster were applied to the bases given. The fibred gypsum was applied neat; all other coats were proportioned 1:2. The expanded metal and plaster thickness totaled ¾″; ½″ of plaster was applied to the other bases shown. †The hose-stream resistance of this construction is inadequate. ‡Fiber in neat fibred gypsum plasters can be wool, sisal, asbestos, or a mixture thereof.

The illustration shows a 16 by 10 ft. partition partly withdrawn from the furnace after a fire endurance test. There have been 147 tests conducted over a period of years. Excerpts from the test summary are given in the table at the left.

The weight of the perforated lath for the partitions having 1-hour or greater fire resistance was in the range of 1530 to 1725 pounds per 1000 square feet. The perforations consisted of holes not smaller than ¾″. One perforation occurred in each 16 square inches of board. ⅜″ Rocklath conforms to these characteristics. It was found that the ratings were not affected by the joints which can be either butted edge to edge or up to ⅜″ apart.

ANCIENT ROCKLATH DEFEATS HURRICANE, FLOOD, TIME



The title for the illustration above could be the well-known USG slogan, "Where research develops better, safer building materials." The lower board is the prototype of the modern Rocklath, taken from a store building in Corpus Christi after 30 years in place. This building survived 3 hurricanes and a flood, yet the sample is hard and the applied plaster is tenaciously and firmly bonded. The upper panel is a sample of the modern Perforated Rocklath—made far superior to even the tough original by unremitting research.

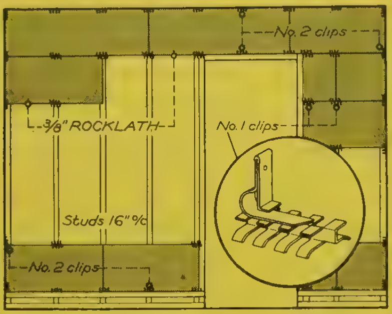
Condensation Protection

Insulating Rocklath (plain Rocklath with a backing of aluminum foil) helps solve the problem of condensation control because it is a highly efficient vapor barrier, as well as efficient thermal insulation. In tests conducted by the Forest Products Laboratory it required 4½ months to pass one gallon of water through 100 square feet of Insulating Rocklath.

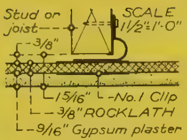
OCTOBER 1941

Resilient System

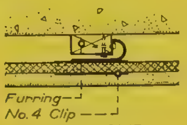
Rocklath over Wood Studs, Joists, or Furring



TYPICAL WALL



NO 1 CLIP



NO. 4 CLIP
For furring, and studs with wool

Description. The USG Resilient System permits Rocklath and gypsum plaster to be applied over wood joists, studs and furring, by means of spring clips to form a "floating" finished plaster surface. In addition to the advantages of Rocklath and gypsum plaster construction, the Resilient System adds 3 unique advantages as follows:

1. **Minimizes Plaster Cracks.** Spring clips take up and absorb structural strains caused by moisture, settlement or vibration.
2. **Eliminates Lath and Joist Marks.** Resilient construction holds the plaster away from the wood framing, providing more uniform temperatures and making streaks less likely to appear.
3. **Reduces Sound Transmission.** Clips dampen vibrations, reducing sounds passing through the resilient construction.

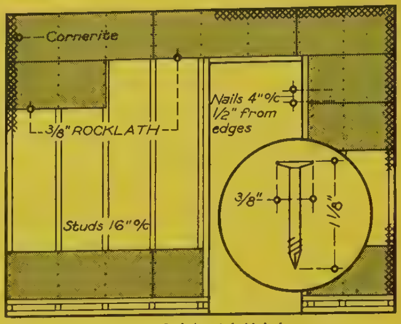
Properties.

Weight of Rocklath, Plaster, and Clips	12.8 lbs. per sq. ft.
Limiting Safe Height	15 feet
Sound Transmission Loss	51.9 db

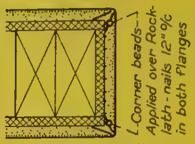
Reference Literature. These publications are available on request:
USG News-Facts, from January 1941 Pencil Points page 33 et seq.
Sweet's Catalog, Section 9/17, page 16.
Booklet "Spring Cushioned Walls and Ceilings," USG Form No. R-24.

Nail-on Application

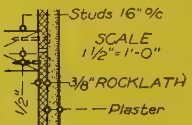
Rocklath over Wood Studs, Joists or Furring



TYPICAL WALL


Corner beads—Applied over Rocklath-nails 12" o/c in both flanges

JAMB DETAIL
PLASTERED OPENING



DETAIL OF END JOINT

Description. Any of the 3 types of Rocklath applied with nails to wood framing represents the utmost in economy consistent with absolute dependability. Applied as shown above in running bond with vertical joints staggered, the installation is rapidly and economically made. The use of Cornerite at the wall intersections and at the ceiling intersection provides reinforcement. Ceilings may be applied in running bond or by means of the "staggered" system. In the staggered method the joints formed by the long dimension of the Rocklath are broken; joints formed by the ends of the Rocklath boards are continuous and are covered with 4" metal strip lath for reinforcement.

Advantages. All the desirable qualities of Rocklath are combined in this application with rapid erection and greatest economy.

Properties.

Weight of Rocklath and Plaster 1 side	5.5 lbs. per sq. ft.
Sound Transmission Loss	39.0 db
Limiting Safe Height (load bearing)	15 feet

Reference Literature. These publications are available on request:
Folder "Perforated Rocklath," USG Form R-27.
Folder "Rocklath," USG Form R-25.
Sweet's Catalog, Section 9/17, page 12.

What Is Rocklath?

Rocklath is in the form of boards made of gypsum encased in a tough, fibrous covering. Extreme care in the control of production results in a product of known and uniform quality. Rocklath is available 1'-4" x 2'-8" and 1'-4" x 4'-0", ⅜" thick. Three types are manufactured as follows:

Standard Rocklath
Perforated Rocklath
Insulating Rocklath

These products are identical except that the Perforated Rocklath provides a mechanical bond by means of regularly spaced perforations, and Insulating Rocklath has a thin smooth sheet of bright aluminum foil mounted on the unplastered side.

Rocklath has many uses which are briefly described in the panels above. Any lathing requirement can be met by one of the systems.

Rocklath Is Incombustible

Gypsum will not burn. It is a rock and cannot burn regardless of the intensity of heat to which it is subjected.

Gypsum is a dry mineral containing 20% of its weight in combined water. When fire or heat attacks these gypsum products the gypsum itself acts as a good insulator and when the heat rises to the boiling point of water the combined water forms a steam vapor as a barrier on the fire side, thus increasing the fire resistance or transmission of heat. This resistance continues for a long time.

Gypsum will not expand when subjected to fire.

Rocklath Is Inert

Rocklath does not expand, warp or buckle when wet plaster is applied over it; consequently it will not shrink and cause cracks when the plaster dries. It contains nothing to disintegrate or corrode—no pitch, resin or gum to stain the plaster. It is not necessary to wet Rocklath before plastering. Rocklath keeps the moisture of fresh plaster from the frame, which prevents swelling of wood members. Plaster dries quickly, permitting the early application of trim and decoration.

Strong Plaster Bond

In U. S. Bureau of Standards tests, a pull of 6 lbs. per square inch (864 lbs. per sq. ft.) was required to separate plaster from standard Rocklath, providing a safety factor of 144. This is approximately three times the bond of plaster with ordinary lath. Gypsum lath and gypsum plaster being related materials, combine to form a more homogeneous wall finish—in contrast to construction made up of plaster and lath with different rates of expansion and contraction and a different reaction in the presence of water.

Samples of gypsum plaster on Rocklath submerged in water for 5 minutes tested 2.99 pounds per square inch bond, equal to 72 times the weight of the plaster. When the samples had dried they regained their original bond of 6 pounds per square inch.

Ease of Erection

A bundle of boards is easily carried by one man. There are no rough edges or splinters. One piece covers the same area as 9 wood lath and requires half the nails. Boards score and cut without waste. It can be sawed or scored along a straight-edge and broken. Billions of feet of Rocklath are now giving service in buildings of all types in all parts of the United States. Lathers and plasterers are thoroughly experienced in applying it and plastering over it. Either size of Rocklath provides a vertical joint break in intervals that are multiples of 16".

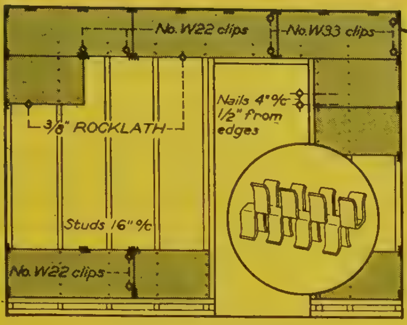
Rocklath Economy

Walls of Rocklath and gypsum plaster cost less than metal lath and plaster, and generally no more than wood lath and plaster.

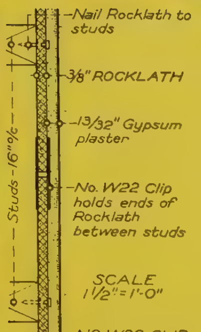
Because virtually all of the plaster used goes on the face of the lath instead of being pushed through for keys, Rocklath saves plaster. The ease with which Rocklath is applied contributes to its great economy. Rocklath's suction makes plastering easy.

Bridjoint System

Rocklath over Wood Studs, Joists or Furring



TYPICAL WALL



NO. W22 CLIP

Description. In the USG Bridjoint System the ends of the Rocklath units come *between* the supports and *not on them*. The end joints are held by Bridjoint W22 clips. The Rocklath at corners and ceiling angles is not nailed to the framework but is reinforced with Bridjoint W33 corner clips.

Advantages. In ordinary construction the displacement of a stud by moisture, settlement or vibration will stress the weakest point in the lathing, which is the meeting of the end joints over the stud. In the Bridjoint System the end joints fall between studs—eliminating vertical joints at the supports and minimizing cracking of the finished plaster. The placing and alignment of framing need not be so exactly accurate using this system.

Properties.

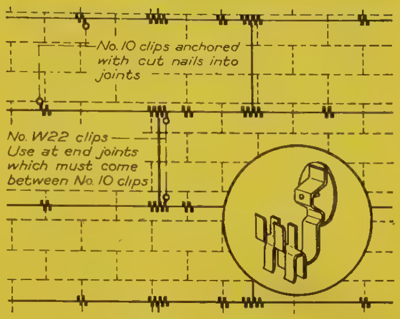
Weight of Rocklath, Plaster, and Clips . . . . 12.8 lbs. per sq. ft.
Limiting Safe Height . . . . 15 feet

Reference Literature. These publications are available on request:

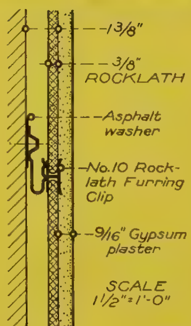
USG News-Facts, from January 1941 Pencil Points page 33 et seq.
Sweet's Catalog, Section 9/17, page 13.
Folders "Bridjoint Plastering System," USG Form No. R-49, R-54.

Resilient System

Rocklath over Masonry Base


No. 10 clips anchored with cut nails into joints
No. W22 clips Use at end joints which must come between No. 10 clips

TYPICAL WALL



NO. 10 CLIP

Description. In the USG Resilient System for Rocklath over Masonry, the No. 10 clips are nailed with cut nails to the vertical mortar joints as close to 16" o/c horizontally as possible. Where the end joints do not coincide with the positioning of a No. 10 clip, a Bridjoint clip is used. This application may be made to any type of masonry. In poured concrete masonry the wall can be drilled for nailing plugs 16" o/c horizontally and vertically to receive the No. 10 clips.

Advantages. The Resilient clip provides a method of absorbing structural displacement strains caused by moisture, settlement or vibration. The introduction of the air space increases the resistance to heat loss and eliminates the danger of disfigurement of the interior plaster decoration. Insulating Rocklath is particularly suited to this application.

Properties.

Weight of Rocklath, Plaster, and Clips . . . . 12.8 lbs. per sq. ft.

Reference Literature. These publications are available on request:

Sweet's Catalog, Section 9/17, page 17.
Booklet "Spring Cushioned Walls and Ceilings," USG Form No. R-24.

Know all three kinds of Rocklath. In addition to fireproofing and economy, each provides distinctive performance characteristics. Each satisfies in a unique way a wide range of building needs.

PERFORATED ROCKLATH. The perforations provide a mechanical plaster key which holds plaster in a double grip. One-half inch of plaster over ⅜" Perforated Rocklath gives the wall a 1-hour fire rating.

PLAIN ROCKLATH. With fibred gypsum plaster this lath is given a 1-hour fire rating by the Bureau of Standards. Plain Rocklath provides a plaster bond of 864 pounds per square foot. Just as good for new construction as it is in remodeling over old walls.

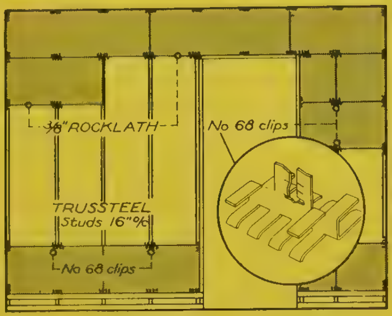
INSULATING ROCKLATH. All the advantages of Plain Rocklath—plus insulation! Insulating Rocklath is the only type of fireproof insulating plaster base available at low cost.

Use it on outside walls. It provides effective resistance to summer heat and winter cold. Insulating Rocklath, properly applied, has insulating efficiency equaling ½" of board insulation.

A moisture barrier, too! Insulating Rocklath has been proved by tests to be a better moisture barrier than glossy asphalt paper.

Trussteel-Rocklath System

Using No. 68 Clip



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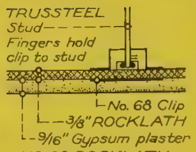

NO. 68 ROCKLATH TRUSSTEEL CLIP

SCALE - 1 1/2"=1'-0"

Description. USG Trussteel-Rocklath System permits the rapid application of Rocklath to Trussteel Studs in non-bearing partitions, by means of the No. 68 clip. The clip is slid over the flange rod and by twisting, it is locked in place.

Advantages. This system has all the advantages of the Trussteel Stud construction plus the economy of Rocklath. The assembly is entirely incombustible, permits the installation of conduits and services of all kinds through the partitions, is extremely light in weight, easily erected without special tools.

Properties.

Weight of Rocklath, Plaster, and Clips	12.8 lbs. per sq. ft.
Sound Transmission Loss, 3¼" Studs	24.0 db
Limiting Safe Height	2" Stud, 10 feet
	3" Stud, 16 feet
	3¼" Stud, 16 feet
	4" Stud, 18 feet
	6" Stud, 20 feet

Reference Literature. These publications are available on request:
USG "Trussteel Manual."
Leaflet "No. 68 Rocklath Trussteel Clip," USG Form No. R-58.

Other Rocklath Applications

To Provide an Efficient Plaster Base

Freflote Bridjoint Over Wood Framing. This is similar to the Bridjoint System shown in another panel, except that the Rocklath is held to the studs by means of No. 60 Clips instead of being nailed. This provides a rapid method of attachment and allows limited displacement of the framing from shrinkage or vibration, without transmitting the stresses to the finished wall surface. The substitution of the No. 61 Clip provides a ¼" air space and may be used to provide freedom from lath marks. The following publications are available on request:
Sweet's Catalog, Section 9/17, page 13.
Booklet "Freflote Bridjoint System," USG Form No. R-53.

Freflote Over Wood Framing. This is similar to the Freflote Bridjoint System except that end joints fall over the framing and are nailed thereto instead of between the framing. The following publications are available on request:
Sweet's Catalog, Section 9/17, page 13.
Booklet "Freflote Bridjoint System," USG Form No. R-53.

1¾" Channel Studs (USG No. 600 Studs). This is a resilient system utilizing the No. 6 clip, combining the advantages of Resilient construction with those of Rocklath. The following publications are available on request:
Sweet's Catalog, Section 9/17, page 17.
Leaflet "Steel Frame Construction," USG Form No. R-26E.
Booklet "Spring Cushioned Walls and Ceilings," USG Form No. R-24.

¾" Channel Furring. This utilizes the 6B clip for Resilient Rocklath and plaster finish over ¾" hot or cold rolled furring channels. The following publication is available on request:
Leaflet "Steel Frame Construction," USG Form No. R-26D.

Suspended Ceilings. A method for quickly erecting Resilient Rocklath suspended ceilings over ¾" furring channels, using the No. 5 clip. The following publications are available on request:
Leaflet "Steel Frame Construction," USG Form No. R-26D.
"Spring Cushioned Walls and Ceilings," USG Form No. R-24.

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WEATHERWOOD. A panel material combining construction, insulation and sound deadening with interior finish.

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When designed for a 240 BTU heat emission rate, Hoffman Hot Water Controlled Heat *shrinks the cost* of all heating plant equipment. Radiators are held to minimum sizes. No pick-up allowance is needed, so boilers and burners can be materially smaller. *Hence the comforts of continuous circulation do not exact a premium price!*

Send today for complete design and installation information. Hoffman Specialty Company, Dept. PP-10 Indianapolis, Indiana.

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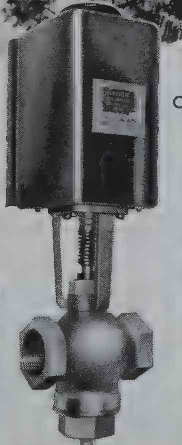
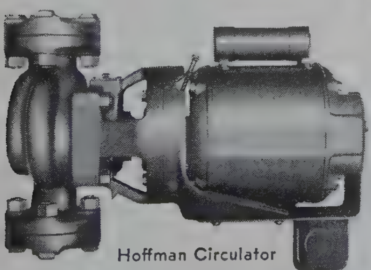
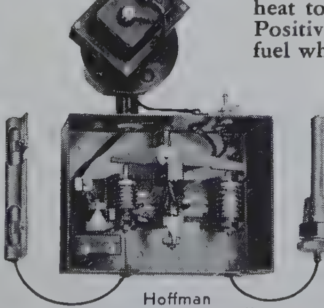
The Hoffman Circulator *continuously circulates* the water in the system . . . the Hoffman Control Valve admits hot water from the boiler to the circulating stream as often as required . . . and the Hoffman Temperature Controller (actuated by outdoor and circulating water temperatures) opens and closes the Control Valve. Adaptable to any automatically-fired hot water boiler.



Hoffman Control Valve



Hoffman Circulator



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Hoffman Valves, Traps, Pumps and Hot Water Specialties are sold everywhere by leading wholesalers of Heating and Plumbing equipment.

PUBLICATIONS ON MATERIALS AND EQUIPMENT

of Interest to Architects, Draftsmen and Specification Writers

Publications mentioned here are all $8\frac{1}{2}$ x 11 unless otherwise noted, and will be sent free, except as indicated, upon request to readers of PENCIL POINTS *by the firm issuing them. When writing for these items please mention* PENCIL POINTS.

FLUORESCENT EQUIPMENT—A profusely-illustrated, 24-page brochure on Linolite fluorescent equipment, has been issued by The Frink Corp., and its subsidiaries, Long Island City, N. Y. Conventionally sectionalized, the book presents a complete range of standard and custom-built fluorescent fixtures. Architects and engineers will welcome the engineering and design data which are included with the graphic charts and views of typical installations.

MATERIALS HANDLING EQUIPMENT—Described in a new 20-page booklet, B-2264, from Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., are electric motors and controls for cranes, hoists, and gantry bridges for use in central stations, construction projects, and industrial plants. Features of AC and DC motors up to 600 horsepower for typical materials handling operations are discussed, with a note on gear motor applications. Methods of motor braking are described and illustrated. A two-page application chart facilitates the selection of motors and control for typical materials handling operations.

PLUMBING SUPPLIES — Catalog D, from Northern Indiana Brass Co., Elkhart, Ind., contains 108 pages, and more than 625 illustrations, listing every type and size of fittings for every conceivable need in plumbing, heating, air conditioning. The complete listing numbers more than 9,000 sizes and types of bronze valves, copper fittings, and plumber's supplies.

HY-V AIR JET—In its Bulletin No. 641, DeBothezat Ventilating Equipment Division, East Moline, Ill., presents a column-mounted man cooler adjustable to blow in any direction. Performance data charts, and engineering drawings are contained in an 8-page bulletin, punched for insertion in a three-ring binder.

LUMBER SPECIALTIES — A.I.A. File No. 19-A-I. A 12-page book from Weyerhaeuser Sales Co., First National Bank Bldg., St. Paul, Minn., lists the lumber specialty products of this firm.

Also from this firm: "The 4-Square Catalog of Lumber Products," and "The High Cost of Cheap Construction." This latter book contains engineering data for correct house building.

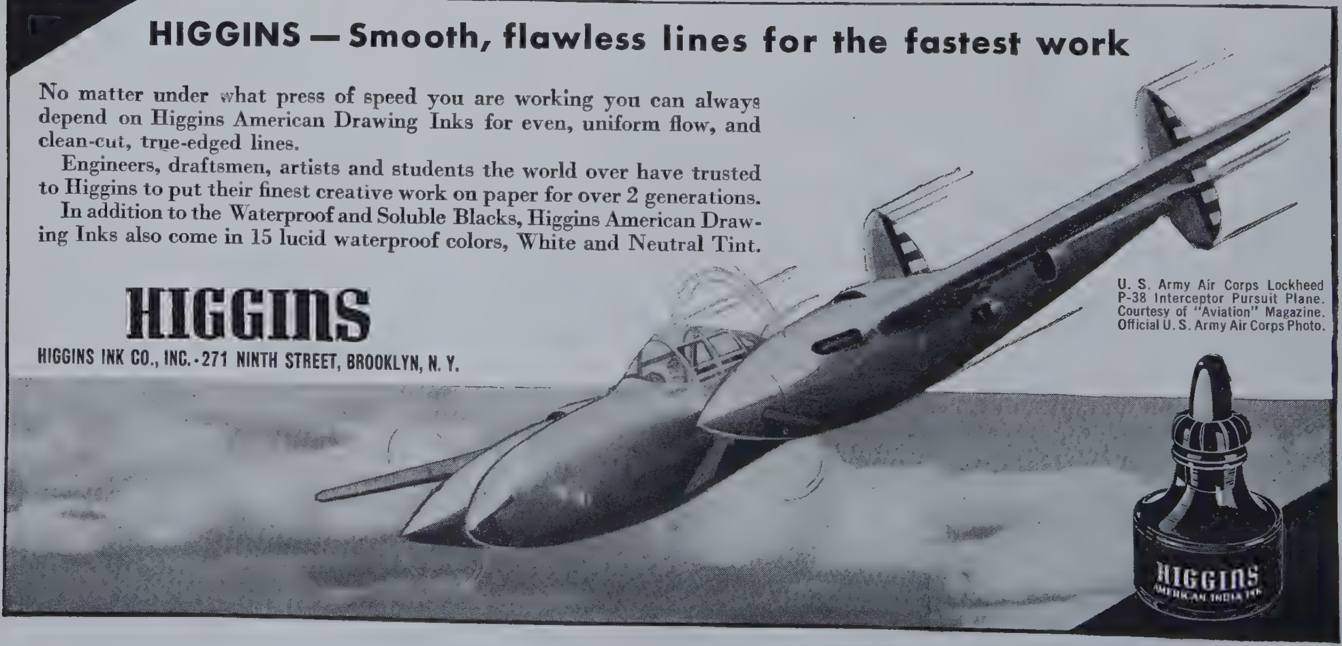
STEEL JOIST CONSTRUCTION—A six-page folder from the Steel Joist Institute, 201 N. Wells St., Chicago, Ill., illustrates and describes the application of steel joist construction to multiple dwelling units in the New York metropolitan area.

Also available from the Institute is a 36-page handbook, "Steel Joist Construction," which includes dimensions and properties of steel joists, standard specifications, loading tables, etc.

ASPHALTIC SURFACING—A copy of the second, and final, progress report on the performance, after three years of heavy traffic service, of a thin asphaltic surfacing for steel battledeck floors for highway bridges has been issued by American Institute of Steel Construction, Inc., 101 Park Ave., New York. The 14-page report discusses the maintenance of the surfacing, has progress photographs, makes general comments on the condition of the roadway surfacing.

UNIT HEATERS AND AIR CONDITIONING UNIT—Fedders Mfg. Co. Inc., 11 Tonawanda St., Buffalo, N. Y., has available two catalogs. One on its Series 4 unit heaters (A.I.A. File No. 30-D-11) gives specifications and capacity data on heaters for commercial and industrial installations. The other, on all-season air conditioning units (A.I.A. File No. 30-F-2) presents the firm's unit in capacities from 1 to 25 tons. Units are available for air conditioning or for summer comfort cooling.

(Continued on page 54)



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U. S. Army Air Corps Lockheed P-38 Interceptor Pursuit Plane. Courtesy of "Aviation" Magazine. Official U. S. Army Air Corps Photo.

A handsome, long-lived floor of Nairn Linoleum in a ward of St. Agnes Hospital, White Plains, New York.

The new trend in the hospital field—more modernization less new construction

● Realizing the growing scarcity of many building materials for new construction, hospital authorities feel that now is the time to concentrate on the renovation of existing buildings. A frequent disadvantage of older buildings is their worn wood floors. In Nairn Linoleum architects find a floor specification that fulfills *every* modern hospital requirement.

For one thing, Nairn Linoleum reduces foot-traffic noises to a minimum, providing the quiet so necessary for patients. And its resiliency makes it easy on the feet. (Lessens foot-fatigue of the staff and increases efficiency.) Nairn Linoleum more than gives the sanitary features that hospitals require. Authorities find its proven germicidal property (unobtainable in other types of flooring) a valuable asset. And its smooth surface has no cracks to collect dirt and germs . . . Keeps spick and span with a minimum of cleaning and waxing.

From an economy standpoint too Nairn Linoleum is ideal. Moderate in first cost, negligible in upkeep expense, this modern linoleum "takes" years of long hard foot-traffic with hardly a sign of wear. For wards, rooms, offices and corridors alike. Nairn Linoleum gives hospitals a permanent, trouble-free specification. When installed by Authorized Contractors, Nairn Linoleum is fully guaranteed.

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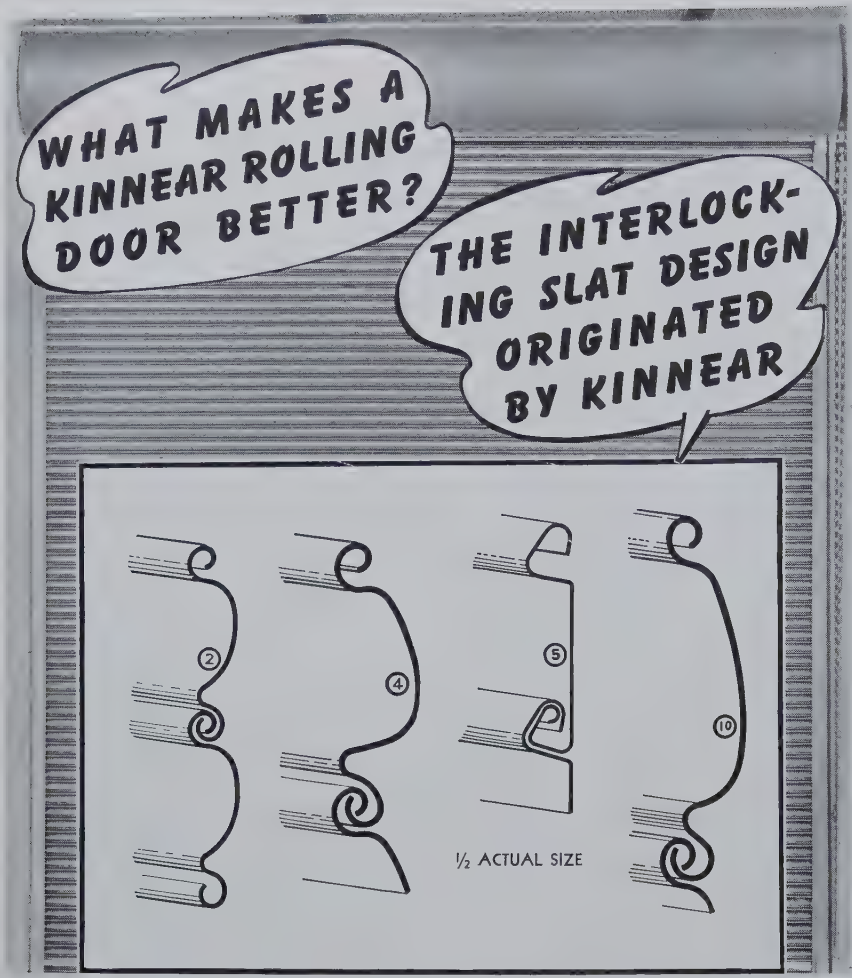
Linoleum Floors and Walls


WHAT MAKES A KINNEAR ROLLING DOOR BETTER?
THE INTERLOCKING SLAT DESIGN ORIGINATED BY KINNEAR
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④
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⑩
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A revolutionary advance in door efficiency was ushered in when Kinnear originated the interlocking steel slat, **nearly half a century ago!** (Before that time, the only rolling door was made of an ordinary corrugated sheet coiled on a pipe.) And today the same basic slat design, improved and modified somewhat, still sets the pace in door convenience, durability, economy **and appearance.**

Here are some of the reasons why this interlocking-steel-slat construction has won such wide preference for Kinnear Rolling Doors . . .

Sheds Water: In the position illustrated above, the sections shed water on the convex side; when reversed top for bottom, they shed water on the concave side.

Reversible: Since the curtain coils in either direction with equal ease, it can be reversed top for bottom (and inside for out, if water-shedding is required).*

Resists Both Horizontal and Vertical Forces: Distribution of metal on opposite sides of the vertical axis is nearly equal, giving equal resistance to horizontal impact or pressure from either side.

Resilience That Absorbs Punishment: Under horizontal pressure, the slats spring open or flatten momentarily, giving the door extra ruggedness and durability.

Free-Acting Joints: Easy articulation at all joints permits quick, smooth, compact coiling at all times.

Compressibility: A small clearance between slats at the joints permits a slight, vertical telescoping of the curtain, which has a cushioning effect when the door is closed. It also permits the bottom bar to adjust itself to any slight slope in the sill between jambs.

Attractive Appearance: Curves in the slats form evenly-spaced horizontal highlights and shadows on the curtain, giving the door an unusually neat and attractive appearance.

** Note: Exception in slat No. 5, used when flush, even door surface is desired. Curtain formed of No. 5 slats coils freely in one direction, locks vertically in direction opposite coil.*

Every one of these features contributes to client satisfaction when you specify Kinnear Rolling Doors. And there are numerous other reasons why you'll want to recommend these **rugged, protective, all-steel doors that open straight upward and coil quickly and compactly out of the way above the opening.** Write for details today, or see Sweet's.

THE KINNEAR MFG. COMPANY, 1900-20 Fields Ave., Columbus, O.

SAVING WAYS IN DOORWAYS
KINNEAR
ROLLING DOORS

PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 52)

REGISTERS, GRILLES, AND ACCESSORIES—A.I.A. File No. 30-J. A set of seven selection charts showing grille size, static pressure, air throw, drop, and approximate floor area of conditioned space is a feature of the 56-page catalog from United States Register Co., Battle Creek, Mich., showing air-conditioning registers and grilles. New lines of louver-type, adjustable bar, and fin-type directional-flow registers are also shown.

GYPSUM SHEATHING—A.I.A. File No. 19-D-33. Complete information on Gypsum sheathing, including its fire resistance, strength, durability, weather and water resistance, non-shrinking, is contained in this 20-page catalog from the Gypsum Association, 211 W. Wacker Drive, Chicago. Several pages show the sheathing in use on housing projects and army barracks.

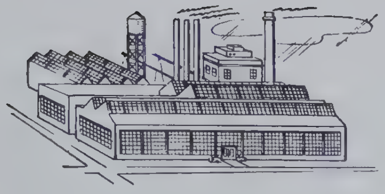
COPPER-FABRIC FLASHING—A.I.A. File No. 12-H. A four-page folder from Wasco Flashing Co., Cambridge, Mass., gives specifications and cross-section drawings on its flashing for spandrel and thru-wall use.

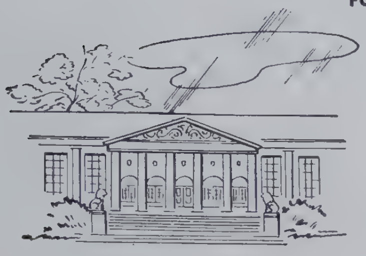
Also from this firm: Folder, A.I.A. File No. 29-H-3, four pages, on its copper-fabric coated shower pan, together with specifications and construction details.

ACOUSTICAL TILE—A custom made tile to fit special conditions is announced by Industrials, Inc., 1530 Chestnut St., Philadelphia, Pa. Known as Softone Acoustical Tile, it comes in travertine finish in standard colors of white, ivory, buff, with special colors available. The four-page folder gives sound absorption coefficients.

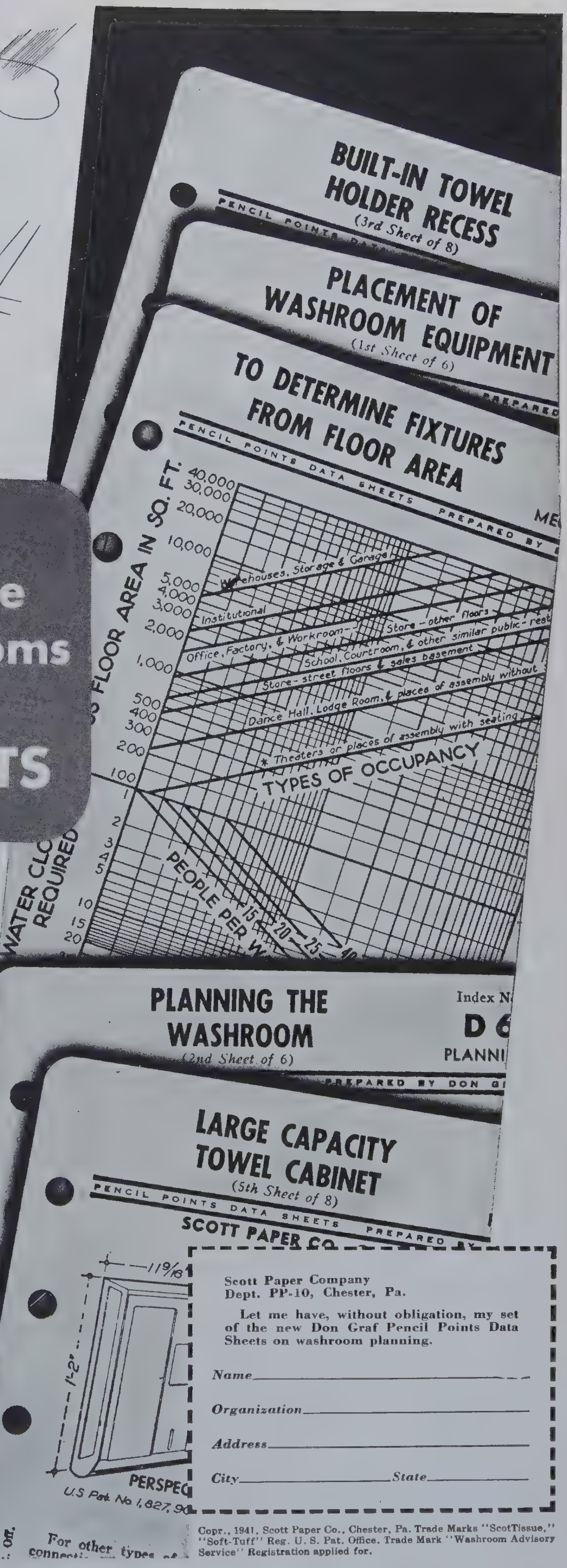
BOILER RATINGS—The Institute of Boiler & Radiator Mfrs., 60 E. 42nd St., New York, has a revised edition, dated March, 1941, of "I-B-R Ratings for Cast Iron Boilers" listing all boilers for which IBR ratings have been approved up to 30-inch grate width. Testing and rating code for low pressure heating boilers has been adopted as the standard method for determining the output of cast iron heating boilers. It is 5¼ x 8¼ inches in size, sells for 15 cents.

(Continued on page 56)





You can plan more efficient, more comfortable washrooms with these NEW DATA SHEETS


BUILT-IN TOWEL HOLDER RECESS
(3rd Sheet of 8)

PLACEMENT OF WASHROOM EQUIPMENT
(1st Sheet of 6)

TO DETERMINE FIXTURES FROM FLOOR AREA

PLANNING THE WASHROOM
(2nd Sheet of 6)

LARGE CAPACITY TOWEL CABINET
(5th Sheet of 8)

SCOTT PAPER CO.

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School, Courtroom, & other similar public rest
Store - street floors & sales basement
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Theaters or places of assembly with seating
TYPES OF OCCUPANCY
WATER CLO REQUIRED
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COMFORTABLE, sanitary washrooms play an important part in your clients' industrial and public relations programs. It's your responsibility to include in your plans every feature necessary for comfort and convenience. And that's where these new Scott "Data Sheets" will prove decidedly helpful.

You'll find valuable facts on how to solve problems of traffic flow, fixture location and sanitary requirements. Used with the Scott Washroom Advisory Service, they'll help you make any client's good-will program more successful . . . by planning washrooms that pass every test of cleanliness and comfort. For your set of these new "Data Sheets," just mail the coupon.

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Copr., 1941, Scott Paper Co., Chester, Pa. Trade Marks "ScotTissue," "Soft-Tuff" Reg. U. S. Pat. Office. Trade Mark "Washroom Advisory Service" Registration applied for.

PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 54)

NEW IDEAS IN FUNCTIONAL FLOOR DESIGN—A.I.A. File No. 14-P-21. A 12-page handbook for architects and engineers on the uses and properties of open steel grating for floor, stair tread, walkway, ventilator, sidewalk grating, and platform construction. Open Steel Flooring Institute, Inc., American Bank Building, Pittsburgh, Pa.

WIRING HANDBOOK—A new handbook from General Electric Co., Appliance and Merchandise Department, Bridgeport, Conn., describes G-E home wiring. Diagrams show eight different ways it can be installed. Recommendations for the number and kinds of circuits are given, together with a guide for writing specifications. Listed also are materials for G-E home wiring.

Also from the same firm: "Adequate Wiring for Industry," a handbook outlining modern factory wiring practices which can be adapted for all factories. Included is a series of handy tables.

NATIONAL DEFENSE Needs 3 out of every 4

Three out of every four rolls of Arkwright Tracing Cloth made today go straight to defense plants. For head draftsmen in key industrial firms know that permanent transparency . . . quality of finish . . . ease of erasure . . . and ability to take sharp, clear lines in tracing cloth are vital to any production speed-up. These tracing cloth advantages are just as important to the profitable operation of your own business! Write for samples of the Arkwright brands—compare them on all points with the tracing cloth you're now using! You'll see why men who know best are now using Arkwright! Arkwright Finishing Co., Providence, R. I.

Arkwright TRACING CLOTHS

WHERE TO USE VALVES—Fundamentals of valve design and applications are contained in a 7½ x 10¾ catalog from Jenkins Bros., 80 White St., New York. The fundamentals section discusses metals used, and drains and by-passes. An informative section is devoted to ASME power boiler code valves. In the booklet also are six blueprint-type pages showing a representative assortment of Jenkins valves.

SENSIBLE VENTILATION—Ilg Electric Ventilating Co., 2850 N. Crawford Ave., Chicago, Ill., presents pictorially in a 40-page catalog the installation in 26 different types of buildings of its line of ventilating equipment.

HEAT DISPOSAL—A 12-page booklet from Carrier Corp., Syracuse, N. Y., outlines the theory, operation, and principal features of the Carrier line of evaporative condensers. It is full of diagrammatic drawings and photographs, explains in detail the methods of heat disposal from both air conditioning and refrigeration, and from liquids and engine jacket water.

WATERPROOFING CEMENTS—How to waterproof and patch concrete walls and floors is described in a four page, 3½ x 6 folder from Smooth-On Mfg. Co., Dept. 355, 570 Communipaw Ave., Jersey City, N. J. The folder shows how seepage can be stopped from the inside of cellars, etc., how cracks and holes can be repaired.

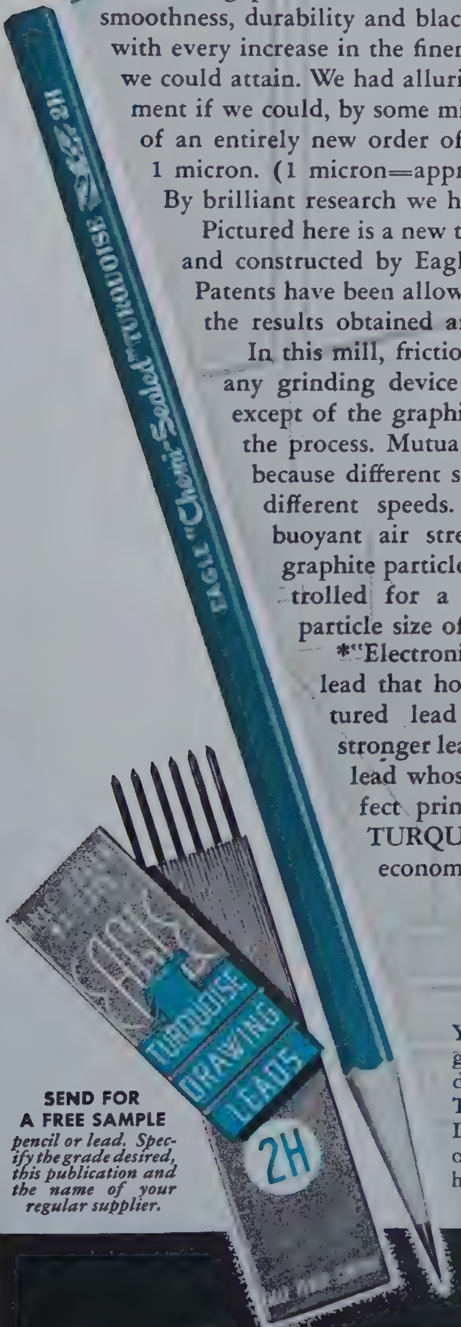
THE PHANTOM DOORMAN—Yale & Towne Mfg. Co., Stamford, Conn., has a four page folder on its PH 7 automatic door opener and closer which works on the electric eye principle. Instead of the electric eye, the door may be operated by switch control, pull cord, push button, or floor treadle.

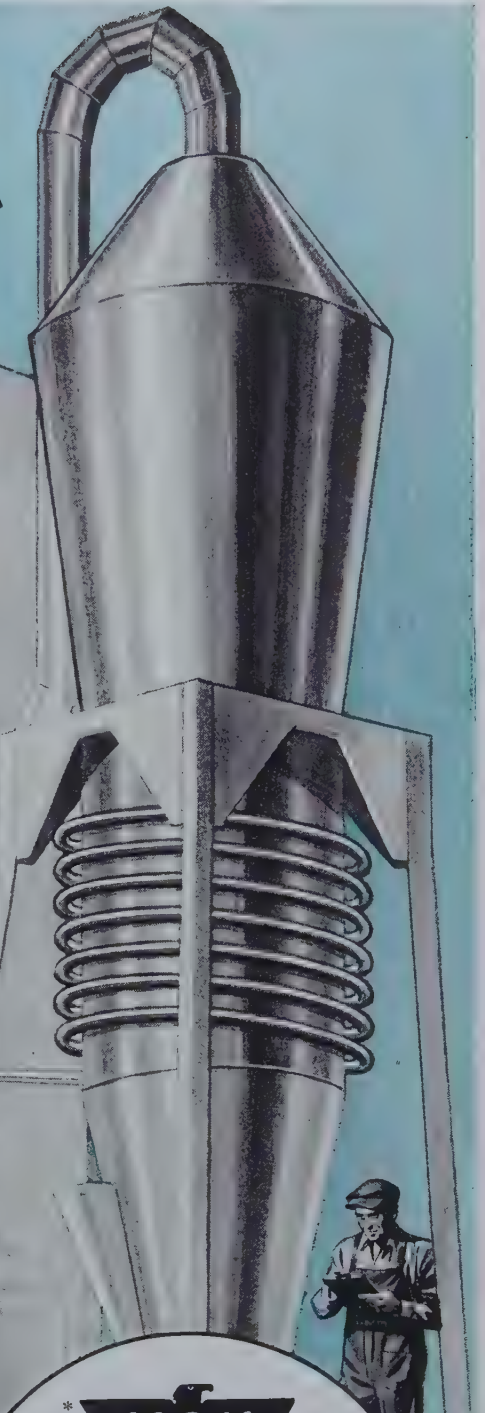
BLOWER CATALOG—A new 64-page combined catalog and engineering data book on Universal blowers has been announced by Ilg Electric Ventilating Co., 2850 N. Crawford Ave., Chicago. Profusely illustrated, the book includes uses of each type, characteristic curves, dimensions, performance data. Fan performance laws, an altitude table, air friction and duct graphs, sample specifications, and a chart of universal discharge arrangements are also reproduced.

(Continued on page 58)

From Eagle's New "MIRACLE MILL"

comes *Electronic graphite of amazing fineness to make TURQUOISE drawing pencils better than ever!





Over a long period, we have consistently increased the strength, smoothness, durability and blackness of Eagle TURQUOISE leads with every increase in the fineness of the graphite particles which we could attain. We had alluring hopes of further great improvement if we could, by some miracle of attrition, produce graphite of an entirely new order of fineness, say in particles down to 1 micron. (1 micron=approximately 1/25,000th of an inch). By brilliant research we have made our hopes come true.

Pictured here is a new type attrition mill, wholly conceived and constructed by Eagle technicians and for which U. S. Patents have been allowed. Both the method employed and the results obtained are revolutionary.

In this mill, friction is not applied to the graphite by any grinding device whatever. There is no movement except of the graphite itself and the air which actuates the process. Mutual attrition is set up in the graphite because different strata of the confined mass move at different speeds. This attrition releases into the buoyant air stream a continuous smoky haze of graphite particles whose fineness can be closely controlled for a consistently uniform product. A particle size of 1 micron is obtainable.

*"Electronic" graphite makes a more compact lead that holds its point longer . . . a finer textured lead that flows more smoothly . . . a stronger lead that reduces breakage . . . a denser lead whose opaque and even lines make perfect prints. These improvements in Eagle TURQUOISE give you extra speed and economy—at no extra cost.

FOR DRAFTSMEN'S LEAD HOLDERS

You can obtain TURQUOISE grading, smoothness and reproduction quality in the new TURQUOISE DRAWING LEADS . . . five inches long, in one diameter to fit all standard holders. Grades: 2B to 6H.

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PENCILS
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EAGLE PENCIL COMPANY • 703 E. 13TH STREET, NEW YORK CITY

PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 56)

SQUARE D PANELBOARDS—A.I.A. File No. 31-D-3. Construction details and technical data on the Multi-Breaker type MH distribution panelboard is presented as Section 5200, of Catalog No. 37 by Square D Co., 6060 Riverside St., Detroit, Mich. This four page folder is punched to fit a standard ring binder.

BOILER BOOKLETS—The jacketed "K" or stoker boiler for small homes, and the Streamlined "A" all-fuel boiler for larger capacities are pictured and described in two folders currently available from Spencer Heaters, Williamsport, Pa.

BORO KITCHEN CABINETS—A.I.A. File No. 35-C-12. Catalog and details on kitchen cabinets and linoleum sinktops are presented in a 10-page catalog from Boro Wood Products Co., Maspeth, Long Island.

BATHROOM CABINETS, ACCESSORIES—A.I.A. File No. 29-i-1. Vitreous porcelain and baked enamel-finished bathroom cabinets, accessories, and wall mirrors are illustrated and described in a 20-page catalog from The F. H. Lawson Co., Evans & Whateley Sts., Cincinnati, Ohio.

GRILLES—A.I.A. File No. 30-J. Grilles made of aluminum, bronze, monel, stainless steel, steel, and other commercially-rolled metals are illustrated and described in a spiral-bound catalog, thumb-indexed for quick reference, from Hendrick Mfg. Co., Carbondale, Pa. A useful 193-page, 9 x 12 handbook for architects, engineers, contractors, and building owners.

RED SPOT LIGHTING SPECIALTIES—Catalog No. 41, fifty pages. A greatly-expanded line of both fluorescent and incandescent equipment is shown in this catalog available from The F. W. Wakefield Brass Co., Vermilion, Ohio.

FLUORESCENT TROFFERS — A.I.A. File No. 31-F-2. An eight page folder, punched to fit a ring binder, describes the Day-Brite fluorescent troffers designed for use with acoustical ceilings of Tee-Bar snap-in block construction. Tables show how to figure footcandle intensities for the troffers. Day-Brite Lighting, Inc., St. Louis, Mo.

STEAM HEATING—The Gorton system of vaporizing and equalizing steam heating systems for automatic heating is described in Bulletin No. 111, four pages, available from Gorton Heating Corp., Cranford, N. J.

WORTHINGTON CONDENSERS AND COOLERS—Bulletin C-1100-B13 from Worthington Pump & Machinery Corp., Harrison, N. J. This 12-page bulletin pictures the Worthington-Carbondale shell-type and multi-pass condensers and coolers, gives construction data.

LIGHTNING PROTECTION—Graphically portraying the inside story of lightning protection, West Dodd Lightning Conductor Corp., Goshen, Ind., presents in a plastic bound, 10½ x 12¼ book, the story of semi-concealed and concealed lightning protection equipment for all types of buildings.

(Continued on page 60)

Skylights THAT INSULATE, TOO!

THERMAG BLOCKS SAVE HEATING & COOLING COSTS
. . . and provide even distribution of light

The sectional sketch above shows how "Thermag" semi-vacuum blocks with "Magnalite" diffusing design are used in skylights such as the one illustrated.

With this type of skylight (1) white, mellow daylight is diffused in four directions to the entire room; (2) thus the skylight area is kept to a minimum; (3) two-thirds to three-fourths of the solar heat, by test, is kept out, as compared to plain window glass; (4) temperatures created by heating and air-conditioning are more easily maintained; (5) the chance of condensation underneath is virtually ruled out; and (6) the blocks, with their reinforced concrete grid, present a soffit quite in harmony with modern ideas of design.

Further details in Sweet's; or your inquiry addressed to 2139 West Fulton Street, Chicago, will be welcome and have our prompt attention.

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AMERICAN 3 way-Luxfer PRISM CO.
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QUIET AIR CONDITIONING with Westinghouse equipment brings cool comfort to patrons of the New Orleans Little Theatre, built in 1797. Thus is combined the charm of the old with the utility of the new.

QUICK INFORMATION in Sweet's Catalog, with 100 pages of specifications and descriptions of Westinghouse electrical products for every building need. Special publications giving helpful selection and application information are available on request to any Westinghouse office.

PUBLICATIONS ON MATERIALS AND EQUIPMENT

(*Continued from page 58*)

GAS-FIRED BOILERS, WATER HEATERS—Seven folders and leaflets have been issued by American Radiator & Standard Sanitary Corp., Bessemer Bldg., Pittsburgh, Pa. Four of the leaflets cover gas-fired boilers for all sizes of buildings, give construction features with cutaway views of each boiler, along with other necessary technical information. The other three folders are of envelope size, and devoted to automatic storage water heaters. Each gives complete information, including ratings on three of the popular heaters in the firm's line.

WASHABLE WALL COVERINGS—The Sanitas Service Division of Standard Coated Products Corp., 40 Worth St., New York, has issued, in a 9¼ x 8¼ book, a collection of decorator-styled designs of permanently washable, fabric wall coverings. The book presents selections for hotels, institutions, also contains suggestions for preparing walls and hangings.

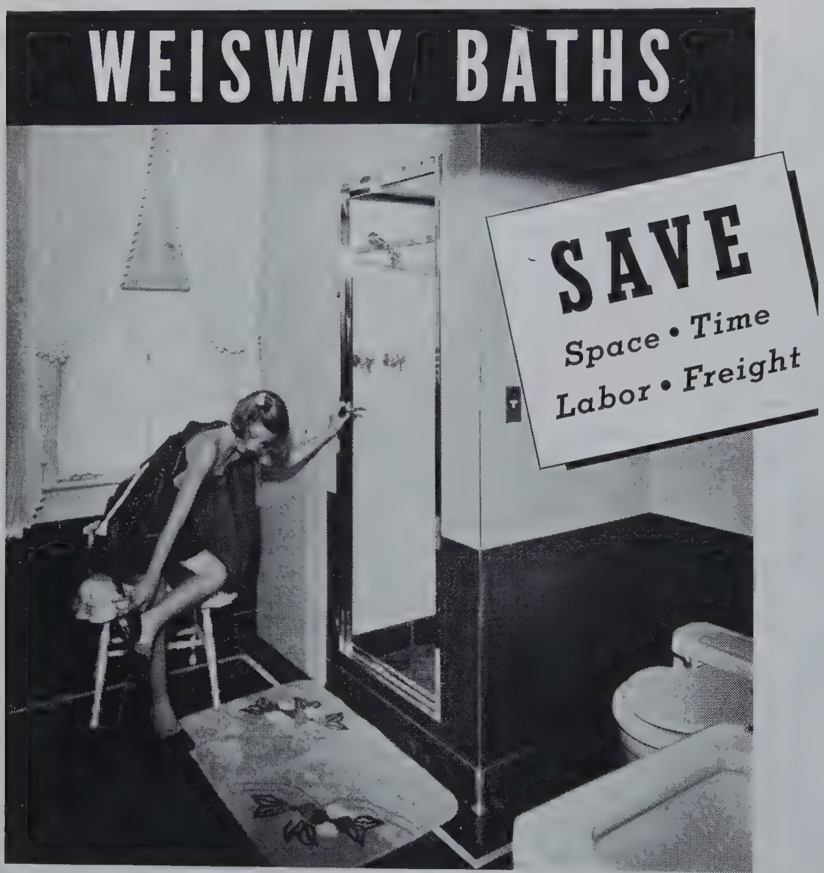
VIBRO INSULATORS—Stripped of highly technical descriptions of the problems of isolating vibration in machines, B. F. Goodrich Co., Akron, Ohio, recently published a 12-page catalog section on its Vibro-Insulators, the metal and rubber devices used to combat the vibration and noise problem. The section has installation pictures and engineer's drawings for each type of Vibro-Insulator.

ROOM VENTILATOR — "What Are You Breathing?" is the title of a two-color publication, 9 x 12, 4 pages, from Carrier Corp., Syracuse, N. Y., describing the operation of its new room ventilator. The folder shows how the window-type ventilator cleans and circulates the air you breathe at home and at the office.

FENESTRA DOORS, WINDOWS —Two new catalogs, Industrial Steel Doors, and Detention Steel Windows (A.I.A. File Nos. 16-E-1). The solid steel windows shown were developed for modern detention buildings. Specifications and details presented are fairly general in scope. The book on steel doors is complete, covers hardware, specifications, designs, and installations for all normal conditions. Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit, Mich.

COMMERCIAL VACUUM CLEANING—Bulletin No. 121R from Spencer Turbine Co., Hartford, Conn., describes the use of its vacuum cleaning equipment for stores, hotels, schools, theatres, churches, apartments, libraries, homes, clubs, other commercial institutions.

CONCRETE MASONRY WALLS —The National Concrete Masonry Association has prepared a four-page circular showing approved details for concrete masonry walls in six-story apartment house construction, and giving all building code references which apply. The use of hollow and solid concrete masonry in bearing walls shown are allowed by the building code of New York City. Construction details, cross sections of bearing walls, and details of concrete masonry units are shown. Available from Portland Cement Association, 347 Madison Ave., New York.



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This compact, comprehensive Specification Guide on TECO Termite Shields fits your Don Graf binder. Six sheets of condensed data to keep at your finger tips.

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(*Continued from page 46*)

fuller pallette the boys wouldn't have started roaring for the loot they were passing up. After all, everyone knows that the cake is only a vehicle to support the frosting, and the latter is what you remember as having made memorable the life which the cake sustained.

The ancient tradition of light reading, light music, and light mental strain in summer has in no way been abrogated in this cesspool of traditional procedure, yet our legislators have pegged along. The State Registration matter for architects passed the House, was emasculated by the Senate and tossed down for re-passage below. Seems the holy status of "registered architect" was left wholly optional, an ingenious stroke offending almost nobody and leaving the humble professionals a'feeling they had a toehold where heretofore nothing obtained. At the moment obscurity beclouds the final acceptance in the House.

Be it said that the Society and Association have both reacted quickly to all important matters despite the heat or humidity. The last named MSAA's announce a general meeting in Worcester, which will have opened the season, September 18.

Upstanding young Architect *Carroll Coletti* may have lapsed briefly from one meaning of the first word, by force of a bachelor's party in his honor, which will have been held some time before this note appears. That would imply that he's facing the only kind of ball and chain which hasn't been priorized by the government. The rest of us old hands lay our present contentment to the fact that we were foresighted enough to sneak in a rubber link.

LEON KEACH

ATELIER HIRONS

A. F. Euston, of the School of Fine Arts, Yale University, New Haven, Conn., is anxious to obtain the names of all Atelier Hirons men, asks that these men communicate with him.

TEXAS CONVENTION

The second annual convention of the Texas Society of Architects was held at the Baker Hotel, Dallas, Tex., October 2nd to 4th inclusive. Feature of the three-day convention was an exhibit of architectural work and of building materials. *Ralph Bryan* was chairman of the general convention committees.

A.D.I. MEETING

"Design in the National Emergency" was the theme of an intensive two-day national conference held in New York October 3rd and 4th by the American Designers Institute. Featured speaker was *Dr. James F. Bogardus,* head of the Consumers Durable Goods Section of the OPACS, who was scheduled to speak to the designers on their relation to the emergency program from the Federal Government point of view. Various other aspects of the theme subject were to be discussed by prominent manufacturers, retailers, merchandise managers, style directors, to make possible a complete clarification of the designer's position in the present industrial picture.

Other speakers at the meeting were to include *Alfred Auerbach,* Editor of RETAILING; *Harvey Stevenson,* A.I.A. President, and Chairman of A.I.A. Civilian Defense Committee; *Leopold Arnaud,* Dean of Architecture, Columbia University.

Typical arrangement of industrial plant washroom — showing Washfountains and adjacent locker rows.

DON'T LET THE WASHROOM BE ANOTHER BOTTLENECK

★ Dermatitis, according to physicians, heads the list of industrial diseases. Proper washing and bathing are effective preventive measures.

● Adequate, sanitary washing facilities are necessary to provide for the growing number of employees.

Bradley Washfountains are providing such facilities in thousands of plants. More than five million hands of industry are washed daily at Bradleys.

The central spray serves clean, running water to each of 8 to 10 persons simultaneously. The spacious deep bowl is self-flushing to prevent collection of water and possible contamination.

Bradleys thus save space, reduce piping connection 70 to 90 per cent, reduce chance of skin affections that may spread and cause many lost man-hours.

To show the spray, sprayhead and soap dispenser, men were cleared from side nearest camera.

Let our experienced Washroom Consultants help you. Their suggestions will save your time and assure the maximum facilities in given space. Bulletin 4010 will be mailed on request . . . BRADLEY WASHFOUNTAIN COMPANY, 2277 W. Michigan St., Milwaukee, Wis.

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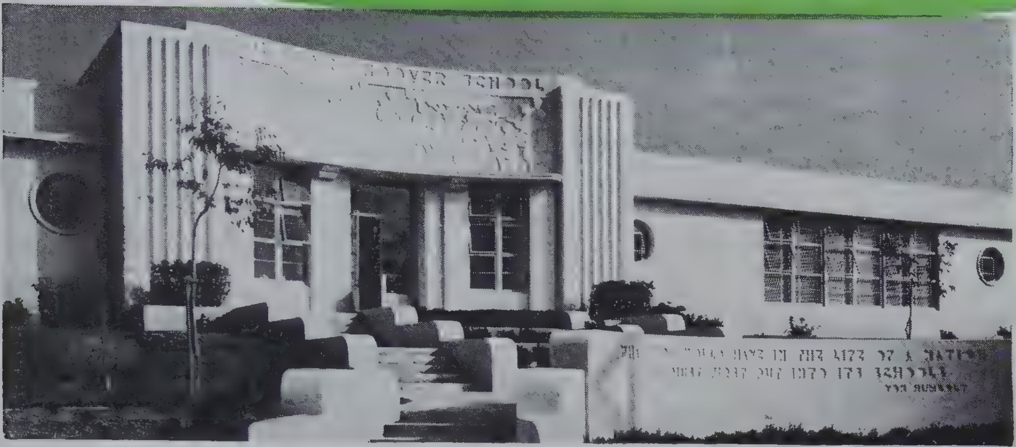
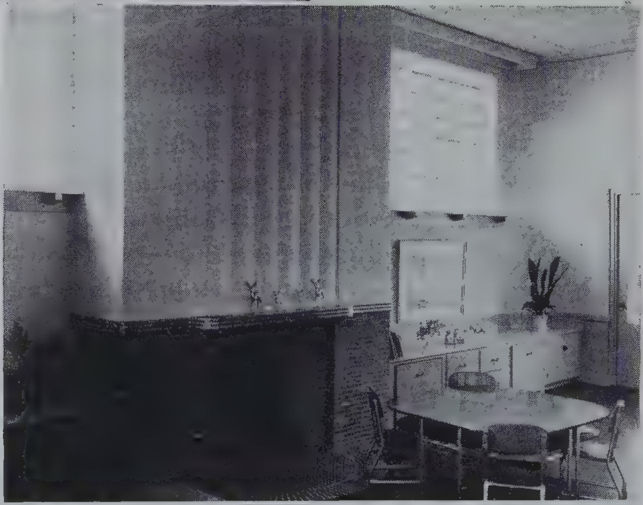
specify versatile Douglas Fir Plywood inside and out!



● Architect Wm. H. Harrison specified Plyform for both the exterior and interior surfaces of the beautiful Lou Henry Hoover School in Whittier, Calif. The J & B Construction Co. was the contractor.

• • •

● The photograph below shows clearly the flawless beauty of the interior walls. There was no plastering. Paint was applied directly to the concrete.



There is a grade or type of this "modern miracle in wood" for every building purpose!

● Douglas Fir Plywood is ideal for schools and other public buildings. Used as walls, it takes punishment galore without showing it; is kick-proof; tests 5 times more sound absorbent than traditional wall material; provides excellent insulation; is receptive to any finish; can be quickly erected or taken down.

The water-proof type, EXT-DFPA, builds smart, durable, streamlined exteriors that are resistant to high winds and earthquakes.

Used as sheathing, 5/16" Plyscord, the utility grade, makes walls 6 times as rigid as horizontal board sheathing, several times as rigid as fibre board sheathing and 40% more rigid than diagonal board sheathing.

PLYFORM IS BOTH LINING AND SHEATHING

The concrete form grade of Douglas Fir Plywood, Plyform, has been used on virtually all the outstanding concrete schools in the nation. Plyform forms smooth, flawless concrete at lower cost; minimizes handling, carpentry and finishing; and gives numerous re-uses when handled with reasonable care.

Read the Douglas Fir Plywood section in Sweet's catalog or send for free literature. Consider how this versatile material can serve you and your clients better. Consider its large sizes, strength, light weight, damage-proofness and other advantages in relation to your problem. Then specify by the "grade trade-marks" shown below and be sure the plywood delivered to your job bears them. For they show the exact purpose for which each panel was manufactured in strict accordance with U. S. Commercial Standard CS45-40. Douglas Fir Plywood Association, Tacoma Bldg., Tacoma, Wn.

● The cut-outs around the individual play yards in the Jennie Baker Tucker School, El Monte, Calif., are in panels of EXT-DFPA, the type of plywood made with a waterproof bond for permanent exterior use. T. C. Kistner, architect.

DOUGLAS FIR PLYWOOD

Real Lumber

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GENUINE DOUGLAS FIR PLYFORM Concrete Form Panel D. F. P. A INSPECTED

GENUINE PLYWALL Douglas Fir Plywood WALLBOARD D. F. P. A INSPECTED

SPECIFY DOUGLAS FIR PLYWOOD BY THESE "GRADE TRADE-MARKS"

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EXT.-D.F.P.A. TRADE MARK REG U S PAT OFF

GENUINE -PLYSCORD- SHEATHING D. F. P. A. INSPECTED

PEASLEE HEADS CIVILIAN PROTECTION COMMITTEE

Horace W. Peaslee, Washington, D. C., Architect, and Chairman of the Air-Raid Protection Committee of the Washington Chapter, A.I.A., has been chosen to head a nationwide organization for civilian protection which is being formed by the American Institute of Architects, according to *Richmond H. Shreve,* A.I.A. president. Seventy-one chapters of the Institute, state associations of architects, and other architectural groups will participate in the movement. Architects will work with government and military authorities, and will relate their activities to the Office of Civilian Defense.

"It is in the public interest that the profession devotes its training and experience to coordinating the ramifications of planning and in applying its vision to reduce the waste and disruption that follow war," said a statement of the Institute made public by Mr. Shreve. O.C.D. Director LaGuardia welcomed architect cooperation.

OBITUARY

COL. H. B. HACKETT

Colonel Horatio B. Hackett, Architect and World War hero, died in Chicago, September 8th, aged sixty-one. After graduation from West Point in 1904 he served as an army lieutenant for two years, then became architectural superintendent of D. H. Burnham & Co. He served as a colonel during the World War, received several military decorations. After the war he became an executive of John Burnham & Co., an investment firm, and still later a member of the architectural firm of Holabird & Root.

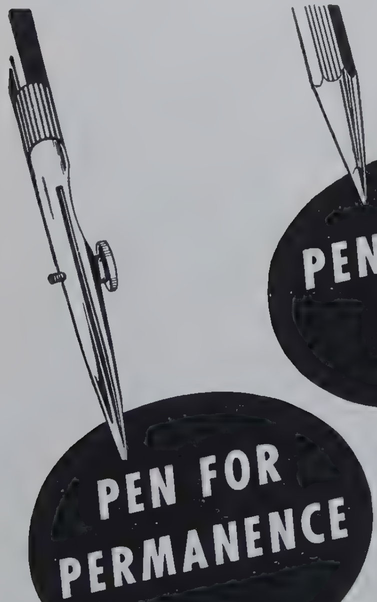
In 1934 he was appointed general manager of the Federal Public Works Housing Corporation, from which post he went on to the PWA as assistant administrator. From March 1938 to January of this year he served as president of Thompson-Starrett, Inc., New York builders. He retired to become head of the Materials Service Corporation, which post he held at the time of his death.

COL. F. L. V. HOPPIN

Colonel Francis L. V. Hoppin, of New York, a retired Architect, died at his Newport, R. I. home on September 9th. He was seventy-four years old. Col. Hoppin studied architecture at Brown University, and the Massachusetts Institute of Technology, spent two years in study in Paris. He worked for a time in the office of McKim, Mead & White in New York before engaging in independent practice. He retired some years ago. A painter as well as an architect, Mr. Hoppin gave several one-man shows of his water-colors in New York.

H. CRAIG SEVERANCE

H. Craig Severance, New York designer of skyscrapers, died on September 2nd at Neptune, N. J., following an operation. Mr. Severance, who was sixty-two, studied architecture both here and in France, began his professional career in 1900 with *Charles A. Rich,* designer of the World Building in New York. Following an association with the firm of Carrère & Hastings in New York, he began to practice alone in 1907. For a time after that he was the partner of *William Van Alen.* He had maintained offices at 36 W. 44th St., New York.



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We could have brought out a pencil cloth when we introduced Micro-Weave Tracing Cloth, but we didn't because we were not satisfied with a "just as good" product. We wanted something better, and now we have it — sufficiently better to prove itself on the drawing board. Micro-Weave Pencil Cloth is made in a new way, and it has a surface with a real pencil affinity — you try it, and you will realize how much of an understatement the word "better" is.

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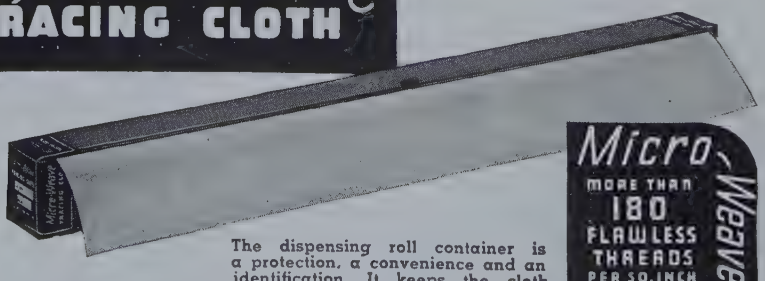

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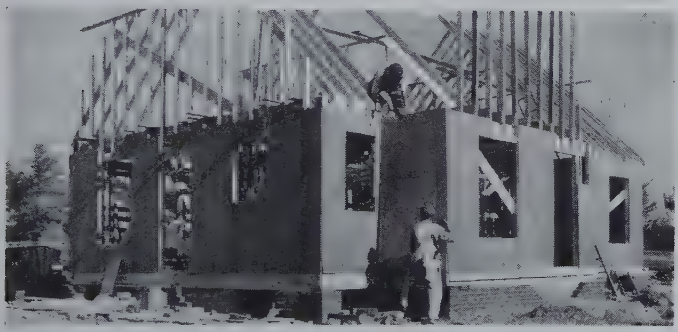

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CITY PLANNING

A graduate program in Regional and City Planning has been announced by the University of Michigan, Ann Arbor, Mich. As a major interest students will analyze and develop actual planning problems under the charge of the faculty. Visiting lecturers will act as consultants and will bring to these students, and to others qualified but not majoring in planning, discussions of current aspects of planning. Some of the visiting lecturers include *Earl S. Draper,* Federal Housing Administration; *Charles W. Eliot,* Director, National Resources Planning Board; *Frederick Bigger,* Planning Consultant, Federal Housing Administration; *Jacob Crane,* Assistant Coordinator, Division of Defense Housing Coordination; *Walter H. Blucher,* Executive Secretary, National Association of Planning Officials.

Further details on the course may be obtained by writing *Wells I. Bennett,* Dean of the College of Architecture and Design.

SCHOOL ARCHITECTS

The directory of "Architects for Educational Buildings," which appears in THE AMERICAN SCHOOL AND UNIVERSITY, a yearbook for school and college executives, is now being revised for publication in the 1942 edition. Last year, names and addresses of some fourteen hundred firms which had served within the past five years as architects for two or more school or college buildings costing not less than $50,000 each were included in the directory.

There is no charge for the listings, and "professional cards" or other advertisements of architects are not published. Architects who would like to be listed should communicate with The American School & University, 470 Fourth Ave., New York.

RESTORATION PROJECT

The first unit of a restoration project intended to create a "Long Island Williamsburg" was dedicated on September 1st in Stony Brook, Long Island. The unit, a brick-and-shingle firehouse, is part of an early Colonial type shopping center. *Ward Melville,* shoe manufacturer, is spending $600,000 to restore the village along Colonial lines, much in the same manner of the Williamsburg restoration. It is expected that by next summer all the old buildings will have been replaced by new and architecturally-integrated structures.

GOLD BOND HUSHES WALDORFS' RUSHES

THE famous Waldorf Cafeterias need no assistance when it comes to planning meals or running fine restaurants. But when noise stepped in, they turned the problem over to Gold Bond sound control research and service.

Gold Bond is prepared to serve you completely in any way you require. For example, within the past six months, the U. S. Army chose Gold Bond to silence airplane motor test chambers . . . to kill sound in arsenal firing ranges. Every day Gold Bond meets new acoustical problems—and licks them with a complete line of sound control products and a carefully chosen organization of Acoustical Distributors ready to supervise a perfect installation—and guarantee results.

Continuous research and dependable service have made National Gypsum Company the largest exclusive manufacturer of wall and ceiling materials in the world, with 21 modern plants serving the country. Under the Gold Bond name, National offers more than 150 *better* products, sold and serviced by more than 300 trained representatives. Gold Bond products include gypsum wallboard, insulation, plaster, lime, metal lath and acoustical materials. And when you specify Gold Bond exclusively, you get the added protection of having *one* manufacturer responsible for the final result. Refer to Acoustical Section in Sweet's, or write today for standard catalog file containing complete specifications on all types of Gold Bond sound control products. SOUND CONTROL PRODUCTS DIVISION, NATIONAL GYPSUM COMPANY, BUFFALO, NEW YORK.

Architect—H. S. Sack *Acoustical Distributor—Dillaby Fireproofing Company*

THE SAVINGS ON THIS GOLD BOND ECONOCOUSTIC JOB were enough to pay for the extra decorative effects that beautify all Waldorf restaurants. Within the past year, 15 of these famous Waldorf restaurants have installed Econocoustic—the smart, decorative tile that lowers noise levels, increases light reflection, and helps insulate.

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Everything - for walls & ceilings

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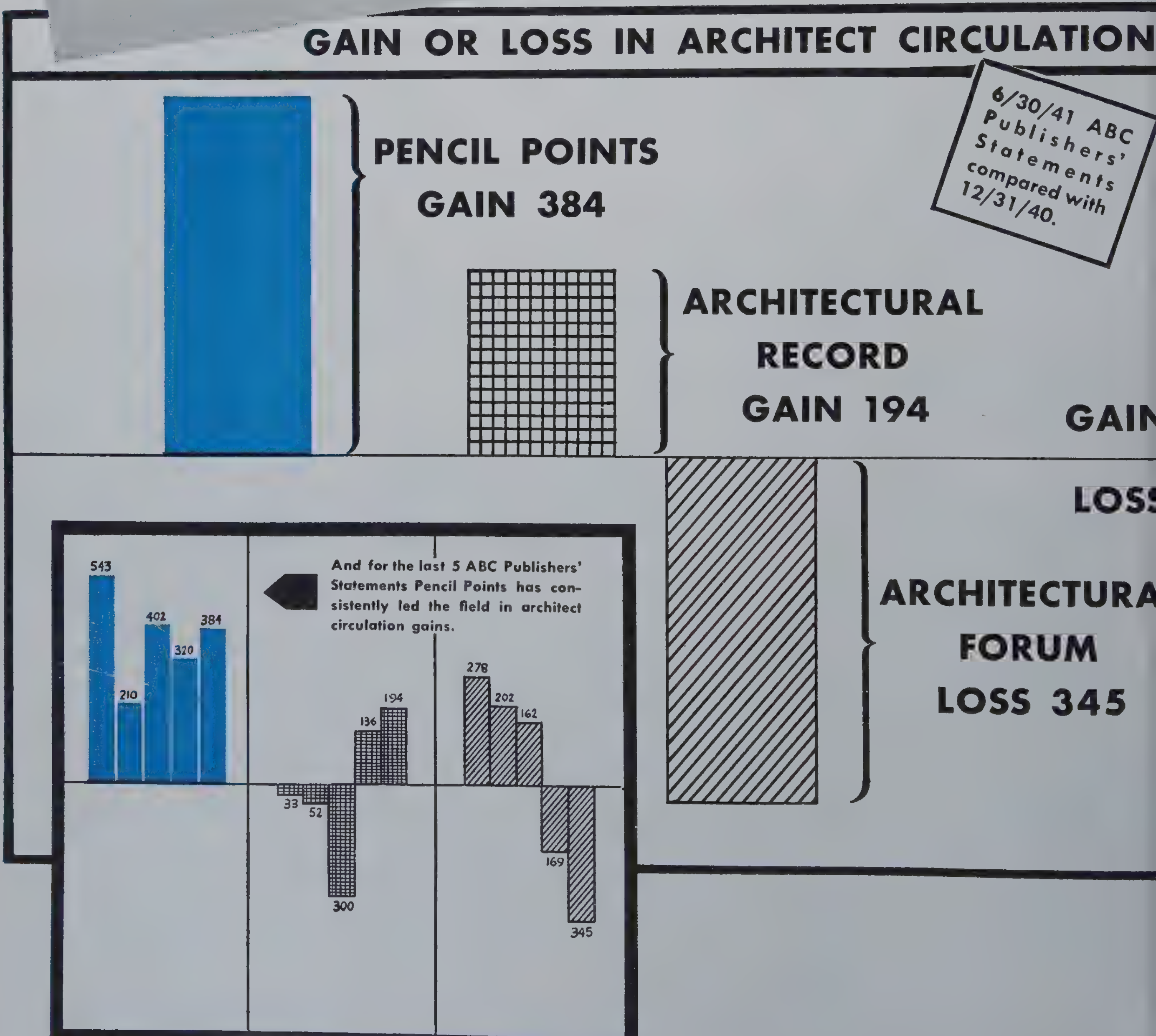
HEARD THE NEWS?



GAIN OR LOSS IN ARCHITECT CIRCULATION

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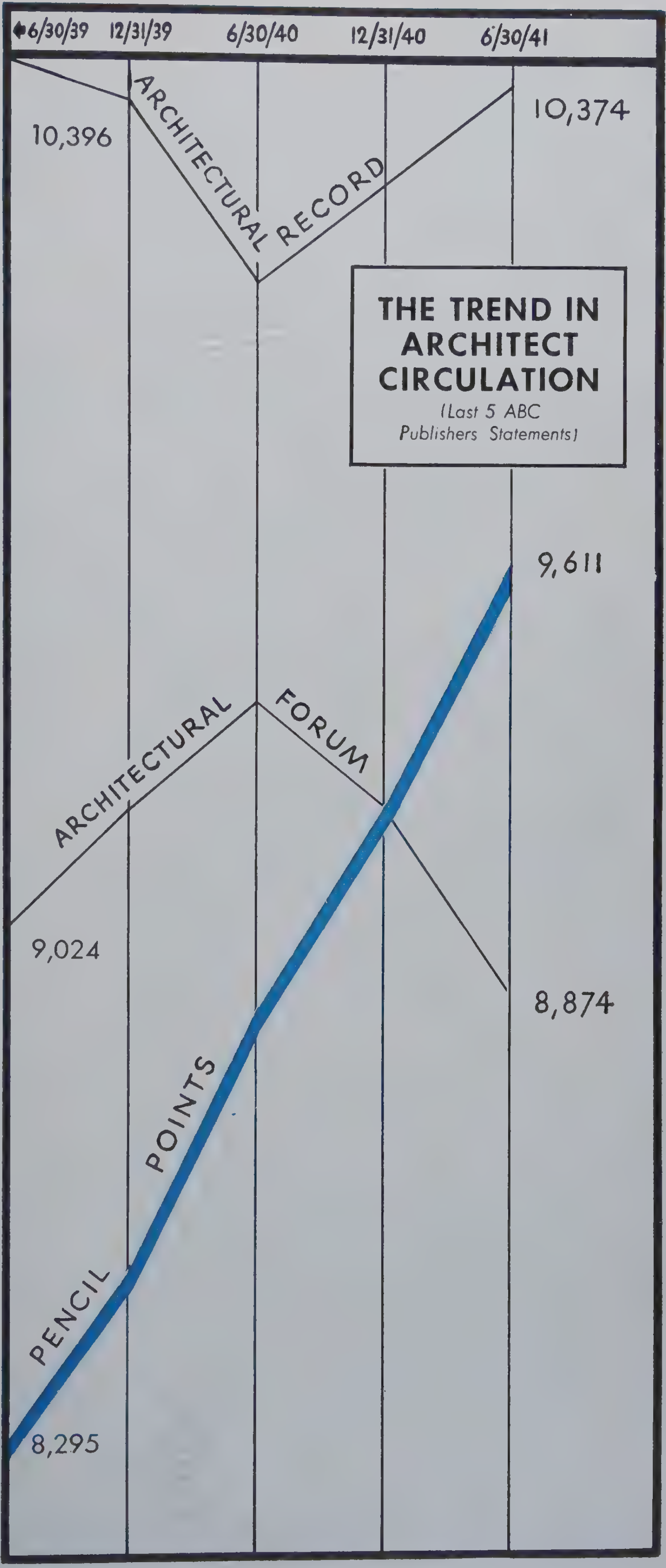

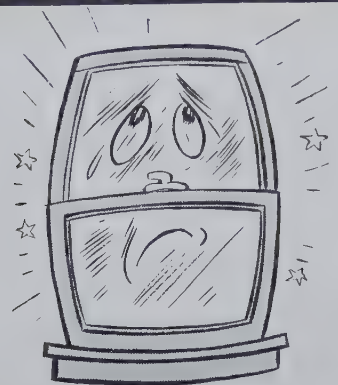

...for MILLWORK MUMPS-

use REZ

TRADE MARK REG. U. S. PAT. OFF.

SWELLING and BINDING due to moisture absorption in millwork or any wood material (sash, doors, floors, trim, plywood) can now be controlled by first applying Laux REZ in plant or on the job.

This unique synthetic resin sealer is especially formulated to *penetrate* into the wood fibre. It leaves a tough, water-repellent barrier on all cell walls, thus controlling moisture absorption . . . and the swollen wood, the grain raising, the loss of dimension that inevitably result. Also, Laux REZ contains a potent toxic that prevents fungus growth, stain and decay. (REZ is quick drying and may be painted or stained over perfectly.)

Apply REZ with brush, saturated cloth, spray or dip treatment . . . get positive, low-cost protection against wood's two enemies, Moisture and Decay. Paint, hardware, and lumber dealers can supply REZ . . . or write your nearest Laucks office for full information.

Don't Forget...
Rustproofing for Metal
REZ for Wood!

REZITING—Industrial Wood Treatment

FREE to manufacturers of sash, doors, plywood, and other wood products . . . a descriptive brochure of Laucks complete series of low-cost wood treatments for *plant* application . . . among them water-repellent, toxic preservatives that meet requirements of National Door Manufacturers Association and Western Pine Association. Write today to your nearest Laucks office.

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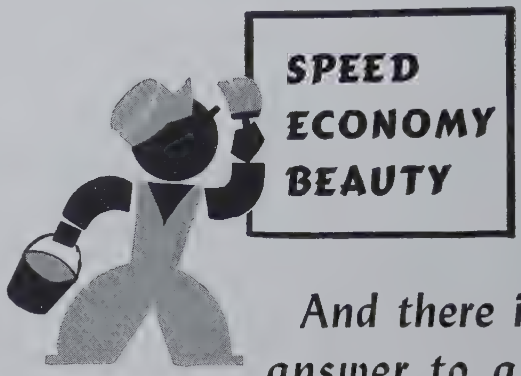
The "A B C" of Painting for *Defense* Construction



And there is one answer to all 3

MURAL-TONE CASEIN PAINT

- *We are told that of the 625,000 units of residential construction needed during the current fiscal year (July '41 to August '42) 525,000 units will be in defense areas.*
- *Defense construction calls for SPEED. When it comes to paint "Speed" is another way of saying Mural-tone. No waiting for walls to dry. The paint brush is used 3 days after the trowel—and one hour later the wall is in service.*
- *ECONOMY. Watch the expense—stretch every dollar. Mural-tone thinned with water only—applied with a wide brush that eats up wall area—is right in step.*
- *But what about BEAUTY? Why not—when it costs no more! And in these trying nerve-racking days the aesthetic satisfaction that comes from COLOR in perfect harmony is a tonic for morale. The answer again—as America's leading architects know—is Mural-tone with its pure clear colors.*

Color cards and full information are yours—by AIRMAIL—*if you wish. There's no time to lose!*

SEE OUR CATALOG IN SWEET'S

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IN 25 YEARS,
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HAS EVER WORN OUT!

CROWDED with manpower — on double and triple shifts — defense plants call for out-of-the-ordinary equipment.

Whale-Bone-Ite Seats stop replacement costs despite heaviest toilet room traffic. Their laminated core and "diamond-hard" molded composition construction, with molded-in-hinges, defy wear and abuse. They're moisture-proof—warp-free—easy to clean!

For maintenance-free service during defense and after, without increased original cost, your No. 1 choice is Whale-Bone-Ite Seats.

THE BRUNSWICK-BALKE-COLLENDER CO.
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MAKERS OF FINE CLOSET SEATS FOR EVERY INSTALLATION

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Check these points yourself!

Mesker is the only Steel Sash in the world with all these features!

- All weathering members hot-rolled ⅛" angles*
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- Vertex corners on all weathering bars*
- One-piece outside glazing sections*
- Frame and ventilator corners riveted and welded*
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that MESKER STEEL SASH gives you at least 35% More Quality for Your Money!

The Steel Sash Merit Meter and the Visual Test Kit provide indisputable, factual proof that you get at least 35% more quality for your money in Mesker Steel Sash. That's why the trend is definitely to MESKER Steel Sash.

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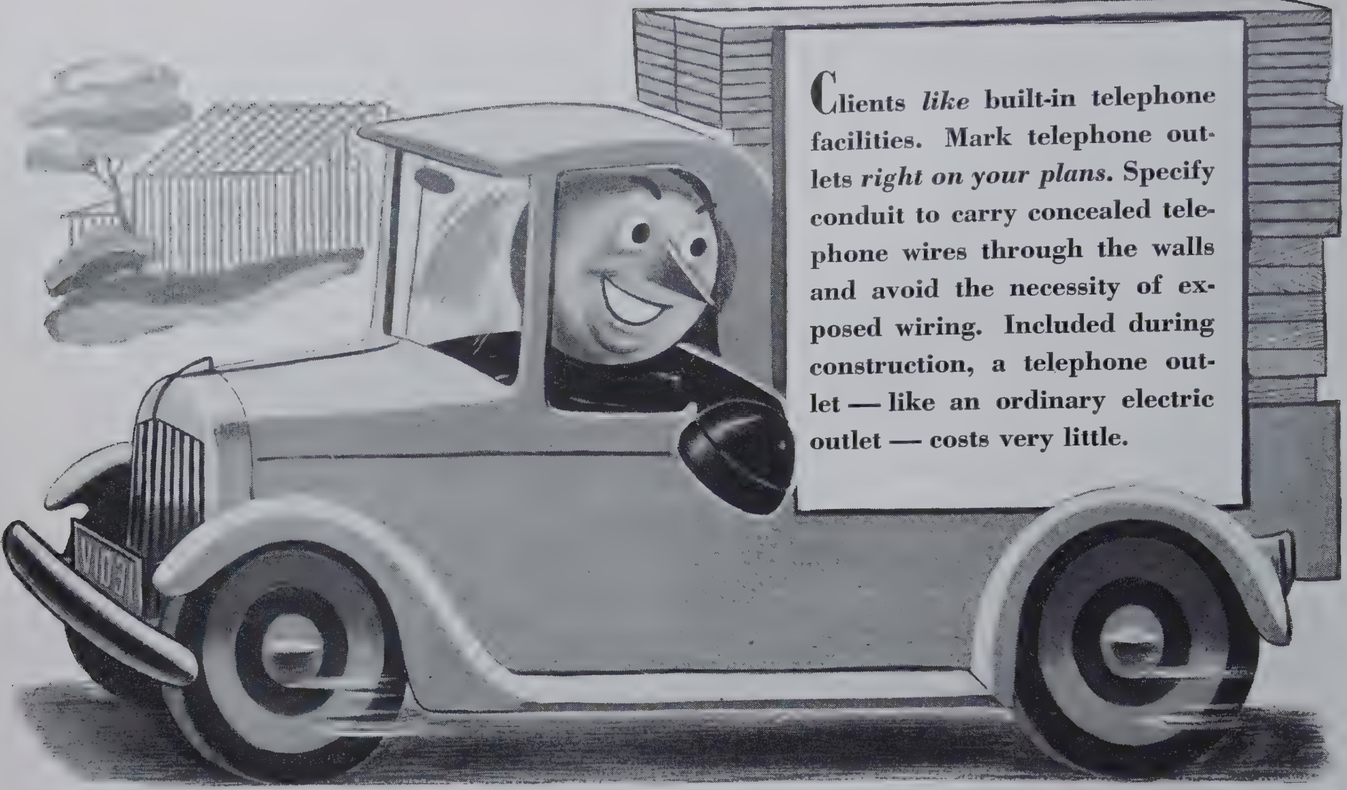


Clients *like* built-in telephone facilities. Mark telephone outlets *right on your plans.* Specify conduit to carry concealed telephone wires through the walls and avoid the necessity of exposed wiring. Included during construction, a telephone outlet — like an ordinary electric outlet — costs very little.

• *Your local telephone company's "Architects' and Builders' Service" is glad to help in planning efficient, economical telephone arrangements. Call your nearest Bell Telephone Business Office and get acquainted with this time-saving service.*

BY THE MAKERS OF UNI-FLO GRILLES AND REGISTERS

venturi-flo

AIR DIFFUSER

RECESSED MODEL

☆ Deflector form of ceiling member minimizes streaking by giving the air stream a slight downward direction.

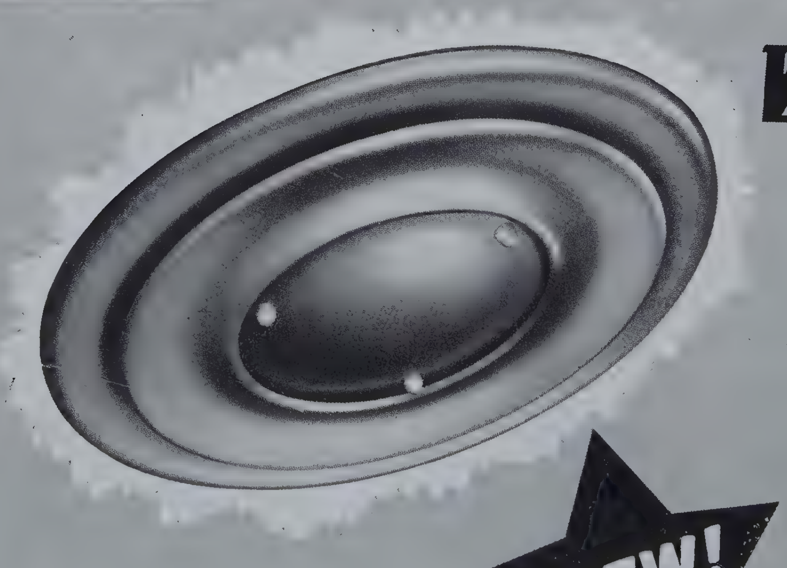
☆ Overall diameter is approximately 1/3 smaller than other models. For example, 10" throat size is 20" overall.

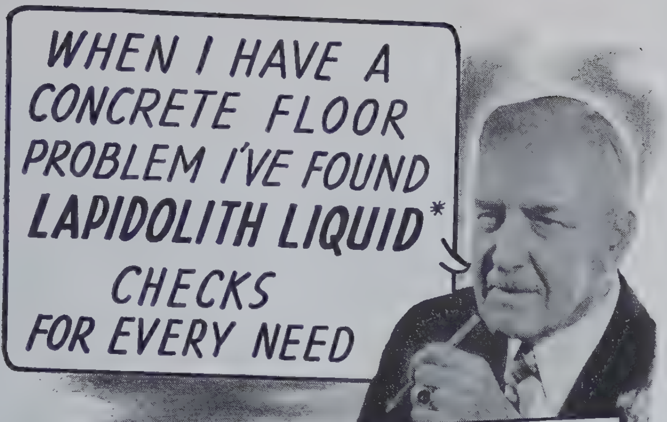
☆ Modification in design results in lower pressure drop through the diffuser.

☆ A wider range of sizes is now available.

For specifications of all UNI-FLO and VENTURI-FLO units, write for descriptive literature. Complete data also in SWEET'S CATALOG FILE (Architectural).

1232 ROCK ST. **BARBER-COLMAN COMPANY** ROCKFORD, ILL.




WHEN I HAVE A CONCRETE FLOOR PROBLEM I'VE FOUND LAPIDOLITH LIQUID* CHECKS FOR EVERY NEED

WILL WEARPROOF CONCRETE FLOORS	✓
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WILL HARDEN CONCRETE FLOORS	✓
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Scientific Laboratory tests reveal that LAPIDOLITH LIQUID has at least 100% lower surface tension than any other comparable treatment. This means LAPIDOLITH LIQUID will penetrate quicker and deeper into the concrete, producing a much more thorough chemical hardening result—and this result is permanent!

Write for complete details concerning LAPIDOLITH LIQUID "on the job" performance. Also see data on LAPIDOLITH LIQUID in Sweet's Catalog, page 5/24.

LAPIDOLITH LIQUID is flushed on finished concrete.

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ONE Time Treatment, Economical
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This is the cover of our new full color catalogue!

- *It is an unusually complete book on asphalt tile.*
- *It gives, in detail, the 14 reasons why you should use asphalt tile.*
- *It shows Kentile's 44 colors, illustrates in color many of the million patterns possible.*

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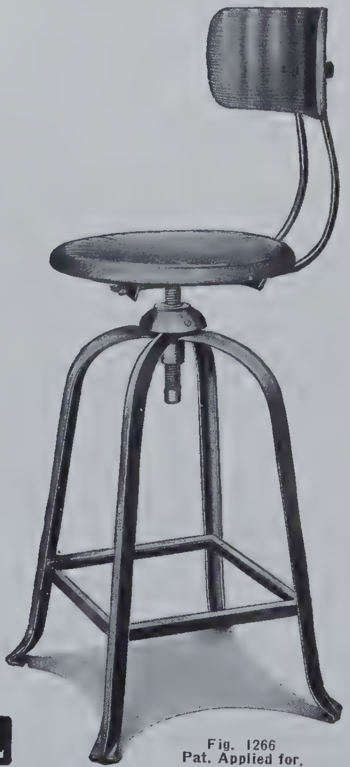

HALLOWELL

Fig. 1266
Pat. Applied for.

Posture Back STEEL STOOL

Popular remedy for "draftsman's droop", the "Hallowell" spring Posture Back that gives to the slightest movement, yet backs you up with solid support. Swivel seat insures full freedom of movement. *Welded steel construction* is permanently rigid . . . lasts lifetimes.

Our own draftsmen have proved how this "Hallowell" Stool provides real work-producing comfort and freedom from fatigue. For better work — and more of it . . . investigate!

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ASKED WHERE he got his ideas, a prominent architect replied: "It's like taking divine dictation. Ideas float around in my head and finally emerge at the end of my pencil."

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WINNER *Techno*-TONE

translates **GRAY MATTER** *into* **BLACK MATTER**
Polished rich green. Packed in metal box. **2 for 25¢**

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TRY *Columbia* TRACING CLOTH

HERE is the latest innovation in TRACING CLOTH containing all of the fine qualities which the most expert draftsman desires. Tested and proven in quality for surface efficiency. Makes clean sharp blueprints. Cleans easily. Corrections of ink or pencil made easily, but the superiority of this NEW Tracing Cloth is best proven by use and you are urged to send for a large working sample sheet.

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FOR HARDWOOD FLOORS That are "RIGHT" Every Time

Specify *Factory-Finished* BRUCE STREAMLINE FLOORING

There's no guesswork when you specify Factory-Finished Bruce Streamline Flooring. Every square inch has been uniformly finished at the Bruce Plant on special machines. Nothing more to do—ready for use as soon as laid.

The finish penetrates the pores of the wood—stubbornly resists scratches, chipping and peeling. Stays beautiful for years without the need of refinishing.

Streamline comes in Oak, Maple and Beech. Three sizes: 25/32" x 3¼", ½" x 2½", or ⅜" x 2". Easy to install—laid just like regular strip flooring. Usually costs *less* than ordinary flooring finished on the job. Nationally advertised. Mail coupon for full details.

MAKE THIS "SCRATCH TEST"

Half of panel finished new "Bruce-Way"; half ordinary surface way. Scrape a coin across both surfaces. See how ordinary finish chips away — "Bruce-Way" Finish is unharmed!

E. L. BRUCE CO., 1465 Thomas St., Memphis, Tennessee

BRUCE

FACTORY-FINISHED

STREAMLINE ***HARDWOOD FLOORING***

Trade-Mark Reg. U. S. Pat. Off.

FLOOR FINISHES • TERMINIX • LUMBER PRODUCTS

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E. L. Bruce Company · 1465 Thomas Street · Memphis, Tenn.

Gentlemen: Please send FREE "Scratch-Test" panel and full details about Bruce Streamline Flooring.

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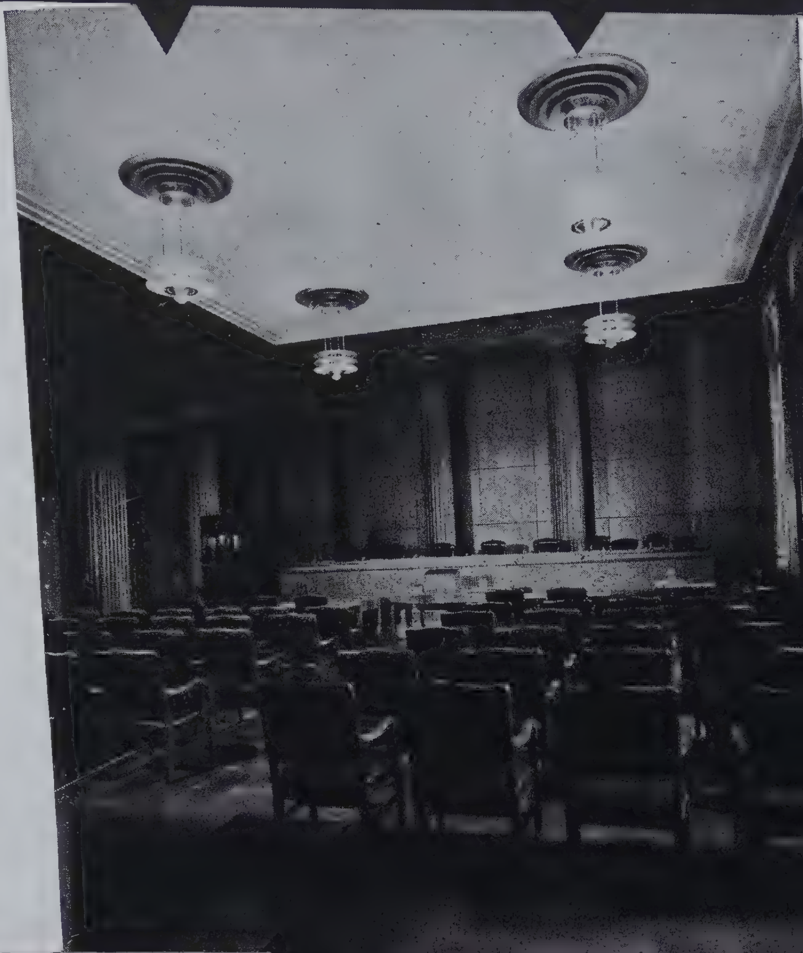
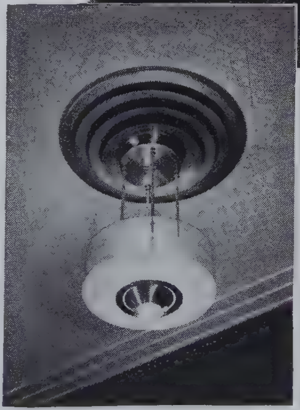
AIR CONDITIONING





Illustrated above is the Supreme Court Room, Department of Justice Building, Raleigh, N. C. — Northup & O'Brien, Architects, Winston-Salem, N. C. Lighting Fixtures in combination with ANEMOSTAT Draftless Air Diffuser designed and manufactured by Benson Manufacturing Co., Kansas City, Missouri.

ANEMOSTAT

Draftless AIR DIFFUSERS

The answer to successful air conditioning is **correct air distribution.** ANEMOSTATS on duct outlets assure correct air distribution by **equalizing temperatures and humidity,** and **eliminating drafts.** As a result, completely comfortable conditions are maintained and operating costs are reduced. That is why ANEMOSTATS are familiar fixtures in all types of buildings, where air conditioning at its best is demanded. ANEMOSTATS are easily installed and may be applied to existing systems as well as new installations.

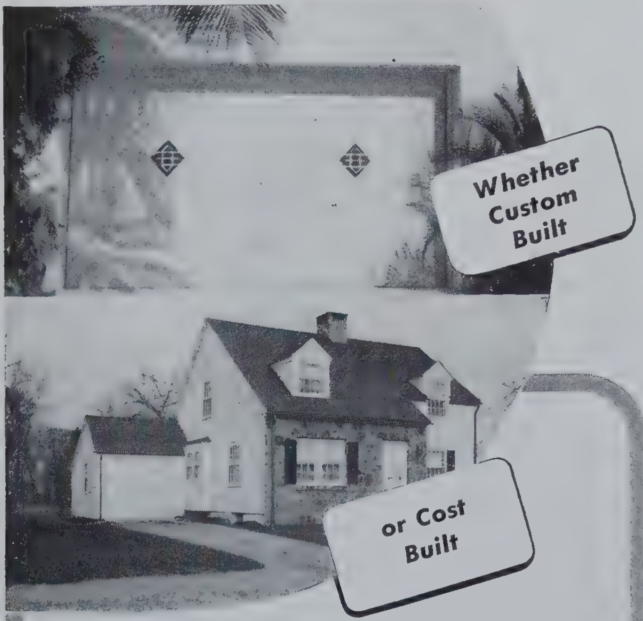
ANEMOSTAT

CORPORATION OF AMERICA

10 East 39th Street
New York, N. Y.

"NO AIR CONDITIONING SYSTEM IS BETTER THAN ITS AIR DISTRIBUTION

STANLEY
"Swing-Up" Hardware
for any garage you build



There is a set of Stanley "Swing-Up" Hardware for any garage door. It can be as easily installed on specially designed doors as on any pair of stock doors. Old doors as well as new. This modern upward-acting hardware set gives you free rein on styling effects. But keeps costs down for your clients.

Doors equipped with Stanley "Swing-Up" Hardware open easily in any weather – even when snow banked. A slight pull starts them up. Heavy springs float them into position – well out of the way.

SAVE TIME ON SPECIFICATIONS

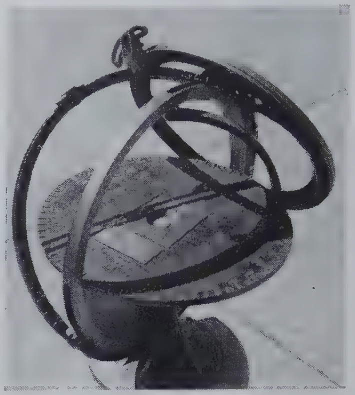
Stanley Catalog No. 61 is a 295-page reference book for architects. It gives you detailed drawings and specifications on "Swing-Up" Hardware and the complete line of Stanley building hardware. Free to architects. For your copy write The Stanley Works, New Britain, Connecticut.

STANLEY

HARDWARE FOR CAREFREE DOORS

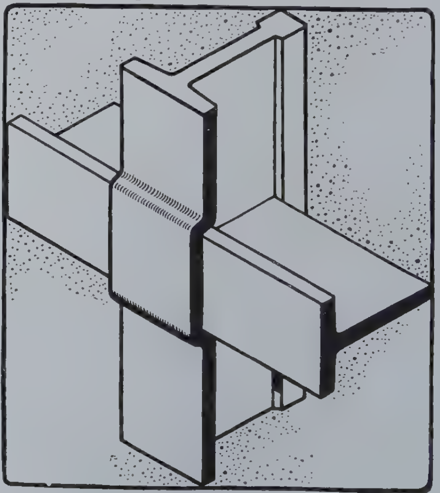
NEW PRODUCTS

SUNDIAL-PLANETARIUM



A sundial which gives the exact geographical location on earth of the individual operator, watch time within a minute or so of the U.S. Naval Observatory time, as well as numerous other interesting facts and desirable information, is being made by Position Finder Corp., 1012 Navarro St., San Antonio, Tex. Attached to each Hagner sundial and planetarium is the owner's personal bench mark, which includes the latitude and longitude of his home or estate. Fashioned of bronze or aluminum alloy, with natural finish wood base, the model shown has an altitude arc, latitude arc, declination arc and slide, a meridian circle, time indicator, other features to show in a highly interesting and instructive manner the movements of the universe, all correlated to the latitude and longitude of the observer.

LOK'D BAR SASH



Feature of the Lok'd Bar Sash from Hope's Windows, Inc., Jamestown, N. Y., is the hydraulic closing of vertical and horizontal muntins which retain their full strength throughout the entire length of the sash. The Lok'd Bar is closed by air pressure, and intersecting bars are mutually embedded and interlocked at the joints. Tests conducted by the firm have revealed that the full section modulus of the sash is 0.085, and that the sash withstood a load of 700 pounds without breaking. Ventilators are constructed as complete casements and frames, solid welded at all corners, flanged inside and out to give broad, continuous, double contacts. Since each vent is a solid welded unit it reinforces the sash where the void is left for its reception. The Lok'd Bar Sash comes in various standard types and sizes, with or without vents.

DECORATED ACOUSTICAL MATERIAL

A new decorative effect for acoustical ceilings of offices, stores, restaurants, schools, and theaters is made possible through a recent development of the United States Gypsum Co., 300 W. Adams St.,

(Continued on page 78)

ROOFING FELT? LOOKS MORE LIKE A SIEVE TO ME!

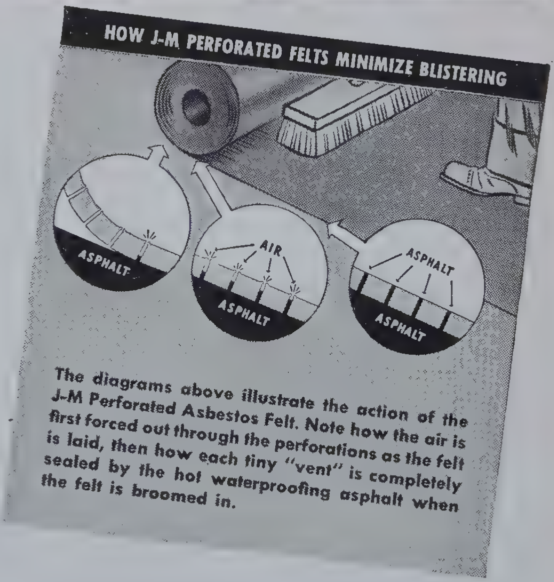
But these millions of tiny holes in the new J-M Perforated Asbestos Felt actually mean a better Built-up Roof . . . Read why:

IMAGINE making a better built-up roof by punching holes in the felts! Yet that's exactly what has been done in the J-M Perforated Asbestos Felt! And the "safety-valve" action these holes provide is sound and easy to understand. It works like this: The minute perforations permit trapped air to escape as the felts are laid, thus reducing objectionable blisters to a minimum. But once the felts are in place, the tiny holes are completely sealed by the waterproofing asphalt!

More flexible and easier to handle, J-M Perforated Felts are quickly broomed into place . . . adhere snugly to the roof deck and to each other. No wonder you get a better built-up roof!

J-M Smooth-Surfaced Asbestos Roof, built with the new Perforated Felt is rotproof, fire-resistant . . . need no protective coating to withstand the sun's drying-out action.

HOW J-M PERFORATED FELTS MINIMIZE BLISTERING

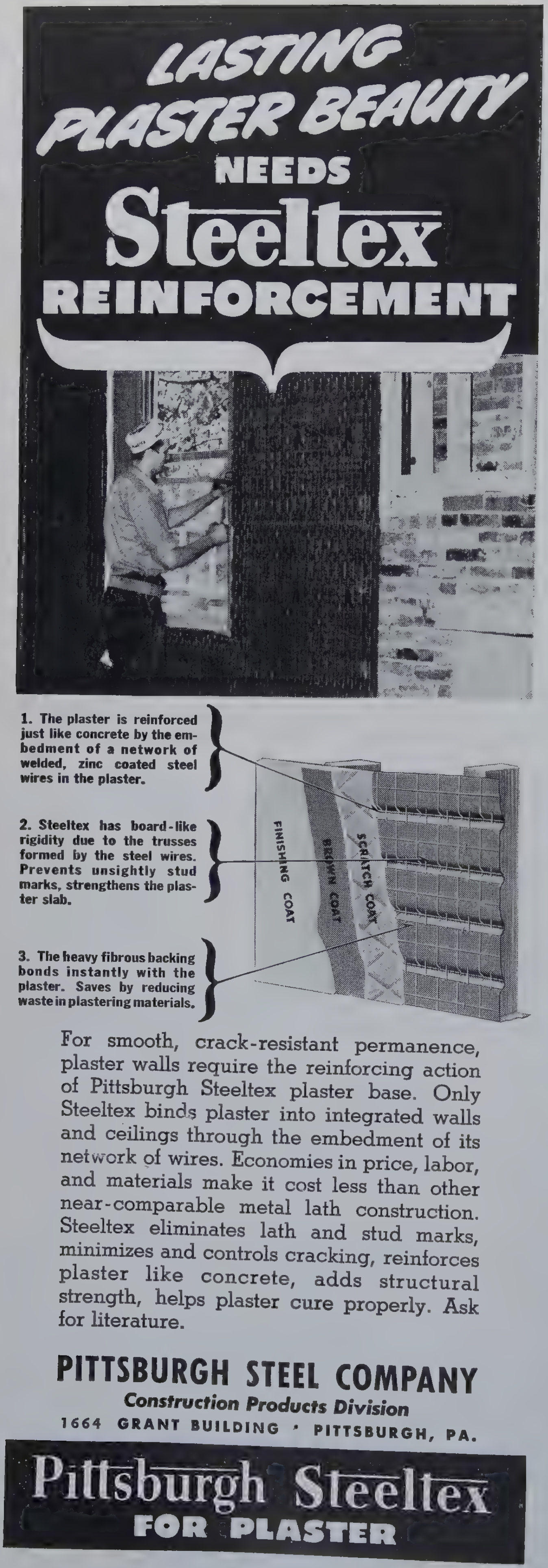


The diagrams above illustrate the action of the J-M Perforated Asbestos Felt. Note how the air is first forced out through the perforations as the felt is laid, then how each tiny "vent" is completely sealed by the hot waterproofing asphalt when the felt is broomed in.

Send for the free 48-page book, "Things You Should Know About Your Roof." Johns-Manville, 22 E. 40th St., New York, N. Y.

JM JOHNS-MANVILLE
Smooth-Surfaced
ASBESTOS BUILT-UP ROOFS

THE ROOF WITH THE SAFETY FACTOR


LASTING PLASTER BEAUTY NEEDS Steeltex REINFORCEMENT

1. The plaster is reinforced just like concrete by the embedment of a network of welded, zinc coated steel wires in the plaster.

2. Steeltex has board-like rigidity due to the trusses formed by the steel wires. Prevents unsightly stud marks, strengthens the plaster slab.

3. The heavy fibrous backing bonds instantly with the plaster. Saves by reducing waste in plastering materials.

For smooth, crack-resistant permanence, plaster walls require the reinforcing action of Pittsburgh Steeltex plaster base. Only Steeltex binds plaster into integrated walls and ceilings through the embedment of its network of wires. Economies in price, labor, and materials make it cost less than other near-comparable metal lath construction. Steeltex eliminates lath and stud marks, minimizes and controls cracking, reinforces plaster like concrete, adds structural strength, helps plaster cure properly. Ask for literature.

PITTSBURGH STEEL COMPANY
Construction Products Division
1664 GRANT BUILDING · PITTSBURGH, PA.

Pittsburgh Steeltex
FOR PLASTER

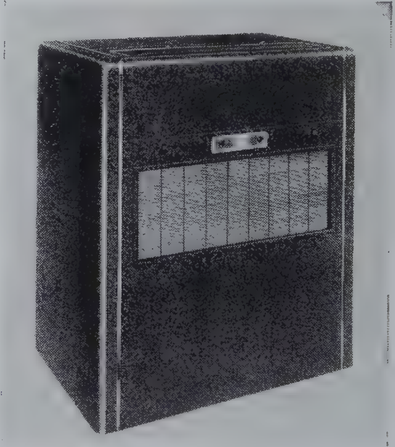
(Continued from page 76)

Chicago, Ill. The innovation is called Motif'd Acoustone, is produced by etching patterns upon the sound-absorbing surfaces of Acoustone. The effect obtained results from the patterns created by a difference in the surface texture of the etched and unetched areas, rather than from garish colors. No painting is required unless a colorful ceiling is desired, in which case the product may be painted without reducing its acoustical properties.

In addition to a selection of basic patterns that are available, architects and designers are given a free hand to create and design their own patterns. The texture and its soft, warm colors, combined with high-lighted basic patterns, give an effect that may be made to harmonize with any architectural scheme of a room or building.

Feature, too, is the spline-alignment which produces a self-leveling surface on which all corners and edges of each unit are in exact position.

PACKAGED AIR CONDITIONING UNIT



Especially designed for small stores, office suites, residences, and similar applications is this SU-20 Unitaire air conditioning plant from Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. The unit provides year-round air conditioning. A steam or hot water heating coil may be added for winter operation. It may also be remotely located with ducts connected. Installation work consists simply of making necessary water and electrical connections.

The 16-gauge steel cabinet is built in one section, houses all of the mechanism. Two reciprocating condensing units instead of the usual single unit are used. One or both may be operated for close control of temperature and humidity under varying load conditions. The centrifugal blower fan delivers 1000 cubic feet per minute.

Safety feature is the spring-loaded valve which will open in case of abnormally high discharge pressures. It closes automatically when normal pressures are resumed.

ZINC COAT RUSTPROOFING

A new system of rustproofing metal during production, known as Irco Zinc Coat, has been announced by International Rustproof Corp., 12507 Plover Ave., Cleveland, Ohio. Zinc Coat is the base material for a hot, chemical-bath process of treating metal to produce a permanent, resistant, and insoluble film of neutral zinc phosphate on metal. This coating is a foundation coating, not a finish coating. Weatherometer tests conducted by the firm show that Zinc Coat plus paint is equal to hot dip galvanizing. The coating is absorbent, produces a bonding surface over which industrial finishes may be applied.

(Continued on page 80)

ONE PRODUCT

Our one product is COLD STORAGE DOORS.

Incorporated in every JAMISON-BUILT DOOR are the results of over 50 years' experience by engineers devoting their entire time and energy to this specialty. You benefit. You get better doors per dollar!

Consult nearest branch or address JAMISON COLD STORAGE DOOR CO., HAGERSTOWN, MARYLAND.

JAMISON-BUILT Super Freezer Door for lowest temperatures. See Bull. 126

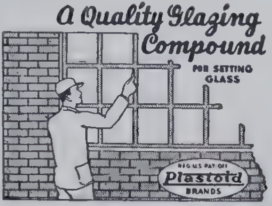
Jamison, Stevenson and Victor Doors

JAMISON-
BUILT COLD STORAGE DOORS

See our Catalog in Sweet's Catalog File

Specify PLASTI-GLAZE

Plasti-Glaze is the glazing compound to specify and use on low maintenance buildings or where the government requests NO Maintenance for 25 years.



THE MOST MODERN PRODUCT FOR GLAZING BOTH STEEL AND WOOD SASH.

PLASTI-GLAZE—the long-life glazing compound—contains more oil (and it's heavier-bodied oil!) than you'll find in any putty. The new Chrysler Tank Plant and Hudson Gun Arsenal are among the many large buildings glazed with Plasti-Glaze. It glazes with ease—is moderate in cost—can be painted immediately, remains permanently plastic.

By specifying this satisfactory product, your glazing problems will be forever ended. PLASTI-GLAZE is guaranteed by America's largest producers of glazing products. Write for complete information.

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PLASTOID PRODUCTS CO. INC.
NEW ORLEANS

CURE AND PROTECT ALL CONCRETE WITH . . .

SISALKRAFT

SPEED

ECONOMY

EFFICIENCY

Just cover the fresh slab with SISALKRAFT — and forget it. This air-and-moistureproof paper seals in the water of the mix—thus effectively curing and protecting at the same time.

No sprinkling, no watching — with resulting savings in labor. No sand, straw, burlap or tarps. SISALKRAFT cures and protects at ONE low cost.

Gives hardness, strength and wearing qualities comparable to curing by complete water immersion. It's "automatic" —takes out the guesswork.

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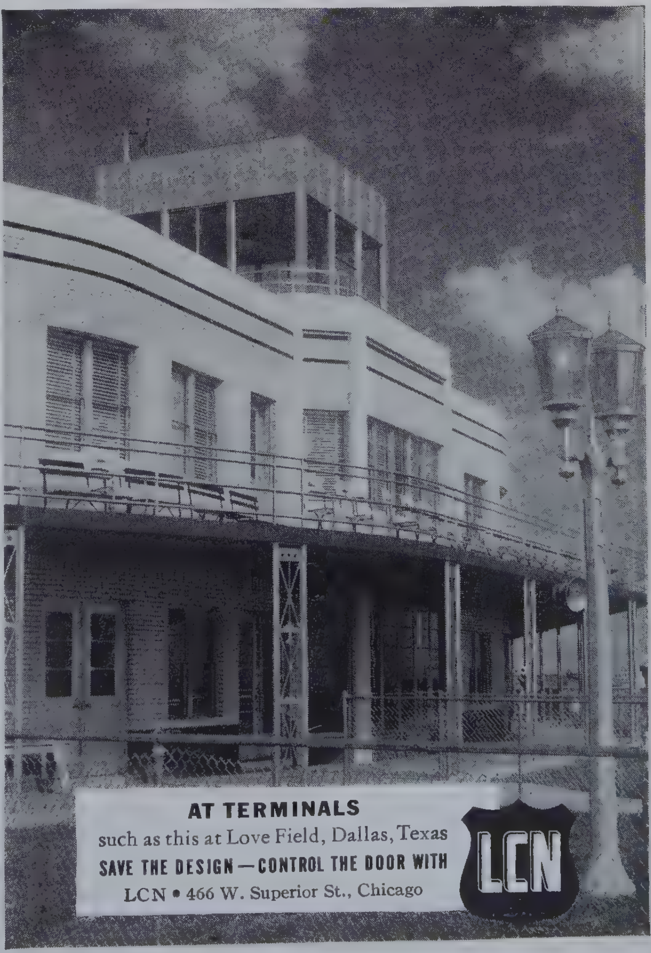
205 W. WACKER DRIVE • CHICAGO, ILLINOIS
New York San Francisco

THE PRODUCERS' COUNCIL



AT TERMINALS
such as this at Love Field, Dallas, Texas
SAVE THE DESIGN—CONTROL THE DOOR WITH
LCN • 466 W. Superior St., Chicago

LCN

It's Northern Hard Maple and Maple Can Take It!

No mystery about Maple in the Western Hills Rollatorium, at Cincinnati, America's largest skating rink.

"Our reason," says R. Schaumleffel, President, "for using Hard Maple was that it proved to be the best type flooring that can be used in a skating rink and that it can take a lot of hard wear."

As simple as that, but it tells the story. Every night up to 2100 people take a whirl at the 33,000 square feet of **MFMA** Maple—up to 1200 people at a time—9600 rolling, grind-wearing wheels digging at Maple hour after hour, night after night.

But Hard Maple stands up. This tough-fibred, tight-grained wood, so amazingly resistant to abrasion, takes roller rink punishment like nothing else can, keeps its smoothness—is easily cleaned.

Stamina like this makes Hard Maple the logical choice wherever long life, cleanliness, and low maintenance in floors are the need—in factories and schools, bakeries and stores—and in homes, too. Don't build or remodel without checking Hard Maple.

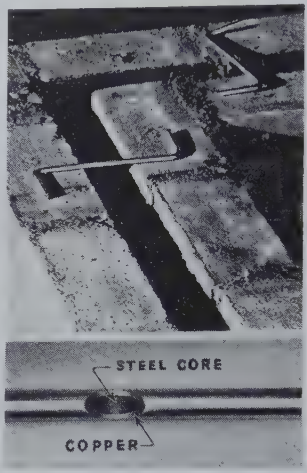
MAPLE FLOORING MANUFACTURERS ASSOCIATION
1785 McCormick Building, Chicago, Illinois

Floor designed, laid in mastic over concrete, by Cincinnati Floor Company. Flooring was lateral-nailed and rolled with heavy roller before sanding. Result is a remarkably level, smooth and quiet roller rink floor.

Floor *with* MFMA Maple
REG U S PAT OFF
(NORTHERN HARD)

(Continued from page 78)

COPPERWELD WALL TIES



Copperweld Steel Co., Glassport, Pa., is now manufacturing, as standard items of production, high strength, non-rusting wall ties for cavity brick walls. The ties, known as Copperweld 204-30" Non-Rusting Wall Ties, are made of .204" high strength Copperweld wire having a minimum breaking strength of 3934 pounds. Standard ties, for 10-inch cavity brick walls, are six inches long overall, with either 3" or 1¾" opposite right-angled anchor legs.

Copperweld wire used in the production of these ties is a wire having a steel core protected against corrosion by a thick, welded-on covering of pure copper. In the lower half of the illustration may be seen a cutaway view of the wire used in the cavity brick wall ties.

GAS-FIRED AIR CONDITIONER

The new Mohawk gas-fired winter air conditioner is streamlined, has a durable steel jacket finished in two-tone blue with suede texture, to harmonize with playrooms or extra rooms. It is a completely automatic unit that provides the comfort of winter air conditioning. The nine sizes of the Mohawk, with inputs ranging from 60,000 to 300,000 Btu per hour, are designed to cover all sizes of installations from the small to the larger type of home.

Feature of the Mohawk is Pre-Heated Air which results in a saving of fuel, according to the manufacturers, since the return air from the living quarters is pre-heated before entering the heating compartment, resulting in faster and more economical heat.

The burner is made of cast iron with patented, high temperature alloy, corrugated ribbons. The unit is quiet in operation, burns natural, manufactured, mixed, or bottled gas. Made by American Radiator & Standard Sanitary Corp., Bessemer Bldg., Pittsburgh, Pa.

PENETRATING FLOOR FINISH

Penetex, a new penetrating preservative for wood floors, is adaptable to all kinds of wood floors—plank, parquet, tongue-and-groove. It not only preserves the top, according to the firm, but also preserves the floor as far as it penetrates. A gallon will cover between 800 to 1,000 square feet, one application, depending on the porosity of the

(Continued on page 82)

BEAUTY AND UTILITY are contributed to Jordan Marsh Company, Boston, by the skillful use of Pittsburgh Glass. In the Fur Salon, the pillars are sheathed on all four sides with brilliant Pittsburgh Mirrors. And PC Glass Blocks, with concealed lighting effects, create an interesting effect in the background.

HERCULITE DOORS make the entrance to the Fur Salon unusually inviting. Strong, durable and crystal-clear, these tempered glass doors and side panels make an immediate favorable impression upon customers.

GLASS IN THE MILLINERY DEPARTMENT is both decorative and practical. Double-faced Pittsburgh Mirrors give accurate reflections at the "try-on" tables, and each table has a good-looking, protective Plate Glass top. Counters are furnished with mirrors, too.

Glass gives new appeal to Jordan Marsh store

(ARCHITECT: EDWARD M. CONBOY)

ARCHITECTS everywhere are calling more and more frequently on Pittsburgh Glass to assist them in creating truly distinctive interiors.

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DOUBLE-WHITE house, Darien, Conn., prize-winner House Beautiful's small house competition. Architect: George T. Gillette, New York City.

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and
you see the PAINT

When the house that starts on your drawing board becomes a *reality*, the owner and his neighbors see your idea, expressed in *paint*. No architect wants to risk the unfavorable judgment resulting from a dingy, peeling, or discolored painted surface. This is one reason why so many architects firmly specify Cabot's DOUBLE-WHITE and Gloss Collopakes—paints which, we believe, are unsurpassed in color, smoothness and durability.

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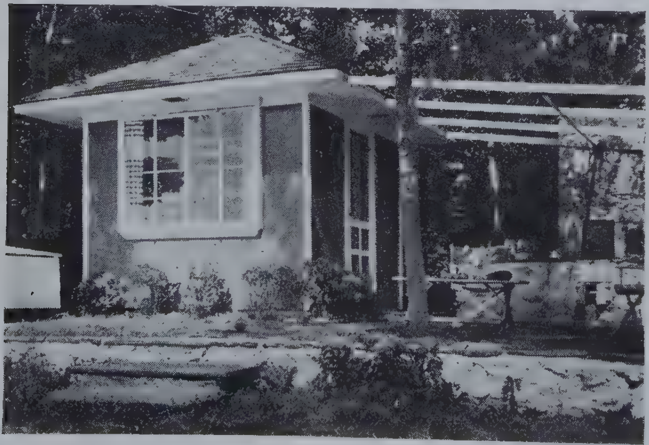
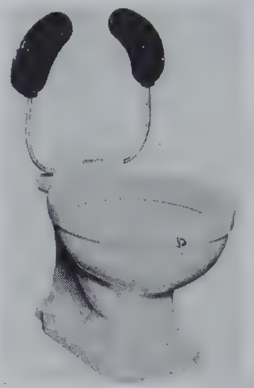


Guest House, Brookfield, Connecticut. Paints: Cabot's Gloss Collopakes in Haddam Barn Red; trim Cabot's DOUBLE-WHITE. Architect: Burton Ashford Bugbee.

(Continued from page 80)

wood. Oil stains are easily blended with the finish to produce various transparent colors. Penetex will not scuff off or chip off because it is in the wood. Described in Bulletin 519 from Truscon Laboratories, Detroit, Mich.

SELF-RAISING SANITARY TOILET SEAT



Expressly developed for use in public rest rooms and large manufacturing plants is this new toilet seat, known as the Sperzel Self-Raising Sanitary Seat. It embodies three new construction principles. The seat consists of two scientifically-designed Bakelite seat pads attached to a plastic-covered steel rod. The pads, the only part of the seat which touch the body, are easy to clean, can be furnished with inexpensive tissue covers for complete protection. A patented spring hinge pulls the seat erect and away from the bowl when not in use. This self-raising action keeps the seat perfectly dry at all times, eliminates the possibility of damage to bowls from falling seats. The seat is easily attached to any standard bowl, has a spring tension bolt to eliminate possible slipping or weaving.

Product of Sperzel Sanitary Seat Co., 1033-35 Metropolitan Life Bldg., Minneapolis, Minn.

BUILT-IN VENTILATOR

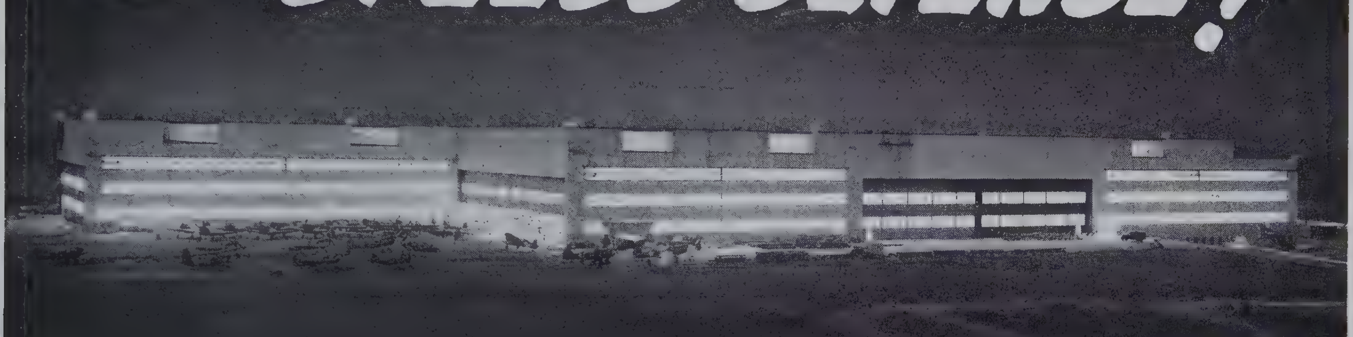
A polymerin-finish grill has now been added by Victor Electric Products, Inc., Robertson Road, Cincinnati, Ohio, to its In-Bilt ventilator line. Polymerin, a quick-bake enamel finish, is said to harmonize with the white and chromium of modern kitchen appliances. In addition to protecting the surface of the In-Bilt from heat, grease, dust, cold, and steam, the finish will resist nicking and marring, is easy to keep clean with soap and warm water.

ACOUSTICAL MATERIAL

A low-cost acoustical material, said to possess an unusually high degree of sound-absorbing efficiency, has been developed by Armstrong Cork Co., Lancaster, Pa. Made of a special-density fibrous composition, the material is called Cushiontone, has 484 deep perforations per square foot. Standard unit sizes are 12 by 12 inches, and 12 by 24 inches. Three standard thicknesses are available: ½, ⅝, and ⅞ inches. The material may be installed on any rigid level surface, while the ⅞-inch unit may be erected to furring strips by nailing.

Cushiontone may be cleaned with a vacuum cleaner or wall paper cleaner, or may be repainted with any standard paint without loss of acoustical efficiency. It is said to provide a high degree of glare-free light reflection, but acts as an insulating material. Since it is light in weight, Cushiontone does not require any wall or ceiling reinforcement before installation. Although its standard ivory color blends well in most cases, the material may be refinished to harmonize with the decorative scheme in offices, stores, theatres, and in other buildings where humidity conditions are not excessive.

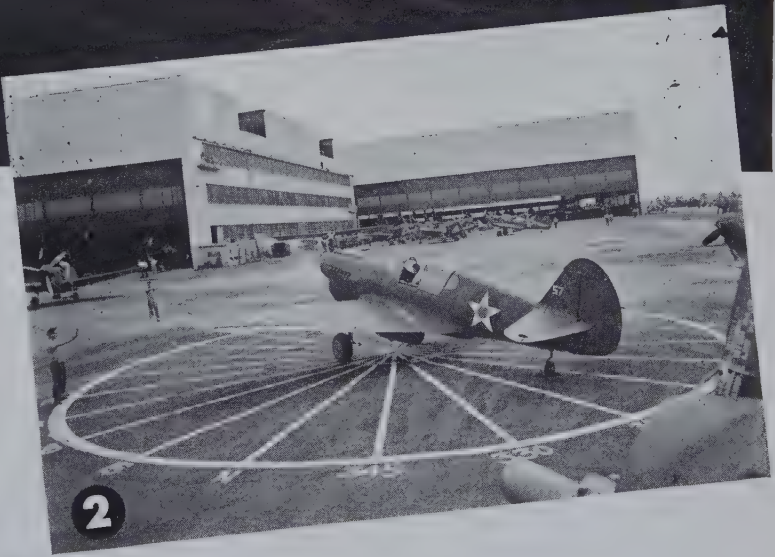
GLASS SPEEDS DEFENSE!



1

Libbey·Owens·Ford Glass provides even, glareless illumination in the huge new plant of the Curtiss-Wright Corporation in Buffalo.

1. Over-all plant view at night.
2. Checking direction-finding instruments before a test flight.
3. Natural daylight, with practically all of the infra-red heat rays removed, evenly lights assembly work surfaces.



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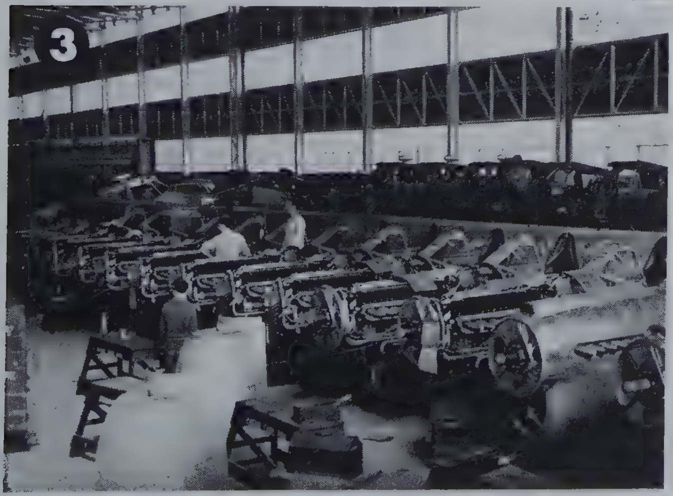

3

ANOTHER HUGE DEFENSE PLANT ADOPTS L·O·F GLASS

Completed in 193 days, Curtiss-Wright's mammoth Buffalo aviation plant is another striking testimonial to the efficiency and adaptability of Libbey·Owens·Ford Glass in National Defense. This $18,000,000 plant, designed by Architect Albert Kahn, has 380,000 sq. ft. of L·O·F glass—much of it heat-absorbing Aklo Glass.

Architects, designers and manufacturers are invited to consult our Technical Service Division on special problems—whether involving the use of daylight in defense plants or where the many L·O·F glass products may be beneficially used in place of other materials now needed for defense purposes. Libbey·Owens·Ford Glass Company, Dept. PP1041, Nicholas Building, Toledo, O.

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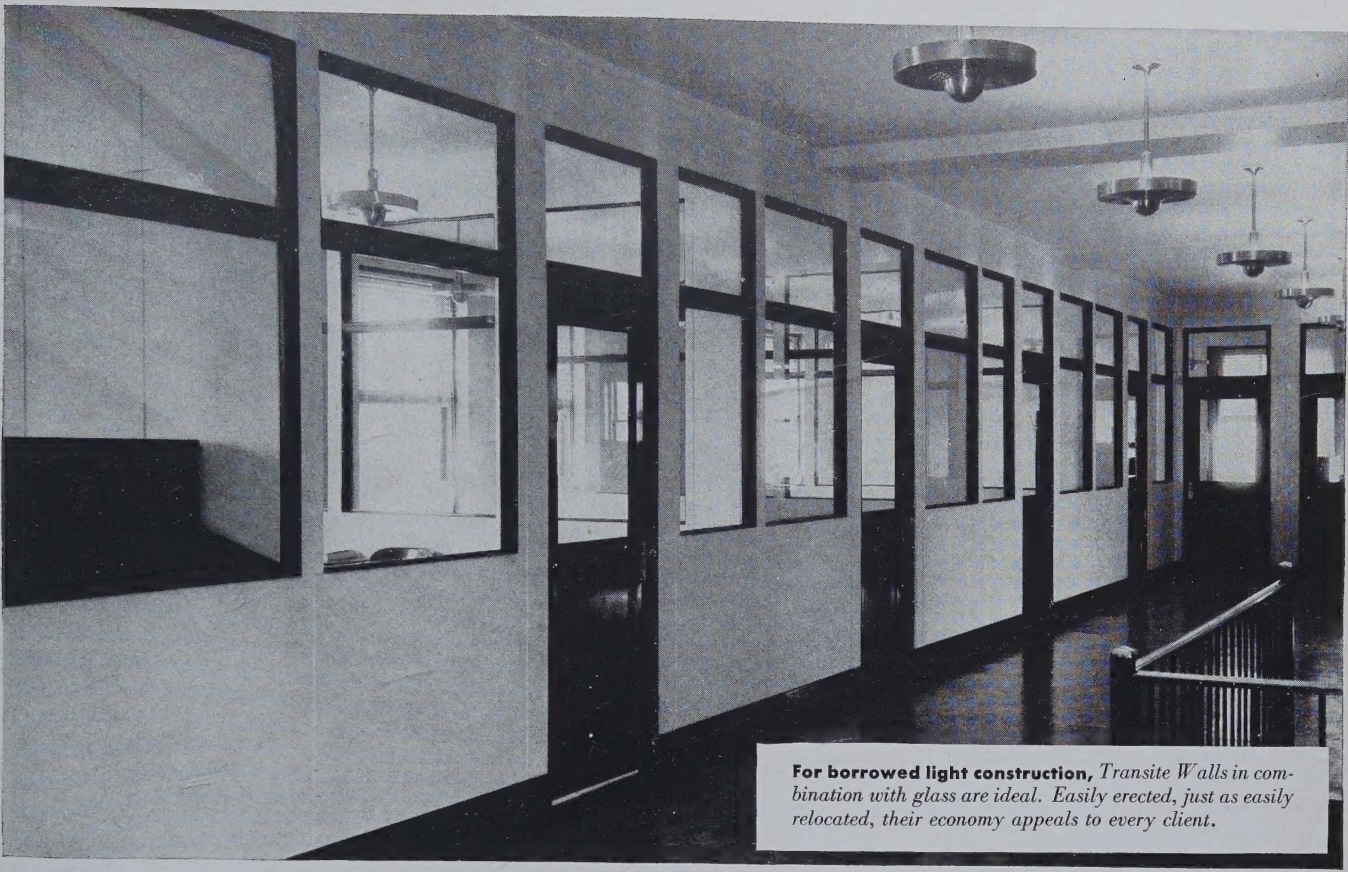

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DEFENSE FIRST!

An open letter from Milcor Steel Company

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Milcor is helping in that program, helping by supplying necessary building material for the construction of cantonments, navy bases, airports, defense housing, and industrial plants for the production of munitions. We are also manufacturing supplies and equipment for the several branches of our armed forces.

Because our products are made of steel and because steel is on the critical list of defense materials, we know perfectly well that we cannot carry on our regular business in a normal way. In the face of these facts, we are not forgetting our obligation to our regular trade. We understand their need for our products in order to keep their businesses operating and to provide employment for their people.

We are continuing to supply our regular trade on a restricted basis in proportion to the amount of raw material available to us.

Our first obligation now is to help in every possible way to aid the defense program. Beyond that we will continue to serve our trade as best we can under present conditions.

MILCOR STEEL COMPANY

EA Tanner

President

MILCOR STEEL COMPANY

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